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March 6, 1961

PULP & PAPER

MICHIGAN
APR 11 1961
ANN ARBOR

Paper Week—industry
gathers for 1961 meeting

More world trade and
investment predicted 47

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at self-sufficiency 52



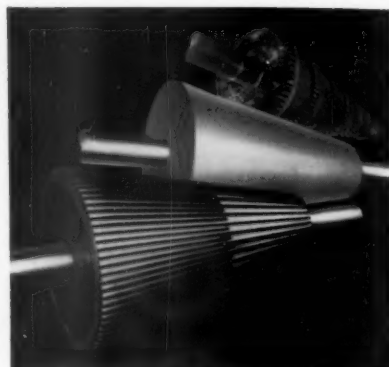
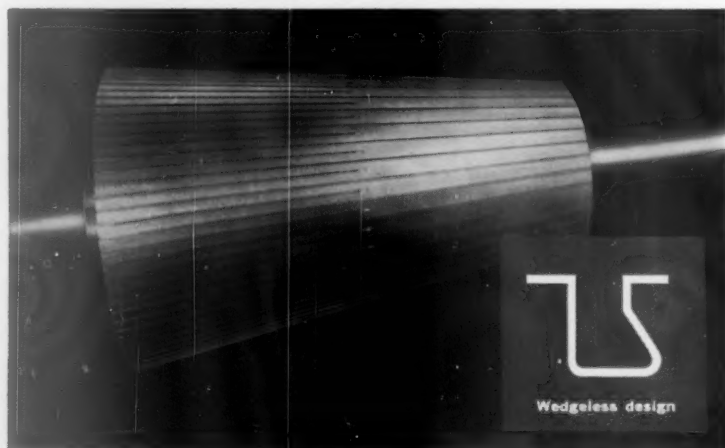
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- because only Emerson Plugs have these design advantages!

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Check the Answers to these Questions**

Question	Emerson Wedgeless Plugs	Other Plugs
Are plugs available in stainless steel?	YES	NO
Are plugs easy to strip and fill because of bandless construction and only one knife to a slot?	YES	NO
Can a full range of knives — both single and duplex — be used interchangeably in the same plug?	YES	NO
Does the design provide impact cushions between the base of the knives and the bottom of the slots?	YES	NO
Is there $\frac{3}{4}$ " of wear depth available on all knives for long periods of Jordaning?	YES	NO
Can used plugs be jacketed with stainless steel?	YES	NO
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These exclusive features are found *only* in Emerson Wedgeless Plugs. In addition, the unique design of Emerson Plugs gives you precision milled, equally-spaced slots so that when the plug is filled, *all* stock gets thorough, uniform treatment over the entire plug surface. Metal-to-metal contact in the slots adds strength and supports the knives their entire length.



Hundreds of mills have gained the advantages of Wedgeless Plug design by having their used plugs jacketed with Stainless Steel through Emerson's patented process.

DURABILITY UNMATCHED

When it comes to wear resistance and durability, try matching the high tensile strength of materials used in Wedgeless Plugs with those of other plugs: Special Stainless Steel — 125,000; Fabricated Steel — 75,000; Cast Iron — 57,500. For additional plug strength, a hammered forged steel shaft is pressed into the Emerson plug body under 60-ton hydraulic pressure. No wonder Emerson Wedgeless Plugs are stronger — more durable and serviceable than any other plugs — and specified by more papermakers.

Over thirty years ago Emerson Wedgeless led the field in Jordan plug design. It still leads today. It has never been equalled. Use Emerson Wedgeless Plugs. Buy the best. Save money, time and trouble. You have a choice of cast or fabricated plugs . . . Stainless Steel Jacket on Cast Steel body . . . Stainless Steel Jacket mounted on your old plug. And remember, of the hundreds of used plugs jacketed with stainless steel, *not one has ever failed in service.* For full information, write.

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Lawrence, Massachusetts

March 6, 1961

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**PULP &
PAPER**

PUBLISHED EVERY OTHER MONDAY

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COVER PICTURE: Despite airlines and austerity programs, TAPPI's Paper Week registration was only slightly off (2,830) from the record 3,015 in 1960. These same factors were blamed for smaller turnouts at APPA meetings.

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NEWS DIGEST...

Kennedy's forest and pollution policies

do not go as far as some advisors wished—he did not favor a single agency to control all natural resources. He ordered more timber made available to “small businesses,” more access roads in forests, more assistance to small forest owners, in cooperation with state agencies. He asked Congress to accelerate forest development to relieve unemployment. At the same time he asked Congress to enact a “wilderness protection” bill along general lines of S. 174. He favored more national park land. He called for spending \$1,250,000,000 in ten years to control water pollution. A special unit in Public Health Service is to be created to prevent pollution. The President favored “multiple use” of public lands.

Paper Week goes international

as many speakers analyzed prospects for more trade and investments abroad. Most were optimistic that pulp and paper exports will increase. World will need more fiber from North America. For these reports and some “helpful hints” for Americans engaged in international business, by Albert W. Wilson, PULP & PAPER editor, back from several months in Europe, see pages 47 to 49.

Pulp industry is in better shape

according to several Paper Week speakers. James L. Ritchie, executive director, Pulp Producers Assn., said the industry is much stronger and efficient than it was before. Others discussed increased tonnages coming in—both in Canada and Scandinavia (see page 5).

APPA president sees tougher profit squeeze

but a good year in 1961. Speaking at Paper Week, Howard Whitaker said competition will be tough, too. President Fowler of CPPA defended Canada's trade with Cuba against American critics. For his views on U.S.-Canada relations, see below.

APPA national safety award for 1960

was won by Buckeye Cellulose Corp., Memphis div. (only one lost-time accident for over 6 million man-hours). Regional awards went to Scott at Oconto Falls (Lake states), Scott at Fort Edward (Mid-Atlantic), Ruberoid at Joliet (Midwest), Keyes Fibre at Shawmut (New England), Crown Zellerbach at Port Townsend (Pacific) and Flintkote at Meridian (South).

Patrician Paper Co., Inc. has bought

empty mill buildings and attached real estate of Scott Paper Co.'s Marinette division in South Glens Falls, N.Y. A new Sandy Hill 137-in. Yankee Fourdrinier will be installed. Consulting engineers are Alvin Johnson & Co. Products: facial and toilet tissues. Officers are Edward B. Mallory, pres., and William H. Holl, vice pres./mfg. Sale is not related to recent FTC decision, says Scott.

South's first glassine paper mill

is now in production at Augusta, Ga., with an annual capacity of 5,000 tons of glassine and grease-proof papers and correspondingly more on other specialty papers. Mill is adjacent to Continental Can Co.'s new Augusta mill from which it buys pulp and utilities. Parent company is Deerfield Glassine Co.

... PAPER WEEK - OPEN INDUSTRY

Five ways to “rescue dollar”

proposed at open industry meeting; Canadian relations discussed

NEW YORK—Dr. Robert A. Kavesh, New York University graduate business school professor, presented the 5-point program, the first of which was to stimulate exports and lower trade barriers to American goods.

The problem of U.S.-Canadian relations, especially on the business front, was the theme of an address by Robert M. Fowler, president of the Canadian Pulp & Paper Assn.

These were the featured speakers for the final Open Industry meeting, held in the Waldorf's Sert Room.

Howard E. Whitaker, beginning his second term as president of the American Paper & Pulp Assn., and chairman of The Mead Corp., was in the chair. It was the last event of Paper Week, preceding the final banquet.

Mr. Fowler diagnosed the “deterioration of relations” between the United States and Canada as the fault of both Canadians and Americans. He carried on this theme in New York. American companies, which now control one-third of the Canadian pulp and paper industry, should provide decentralized

and autonomous Canadian management for the subsidiaries across the border, he said.

Americans, he said, were prone to take Canada and Canadians for granted, while on the other hand, Canadians have been too sensitive and should “take the chip off their shoulder.” Some Canadians found it politically profitable to criticize Americans and American business.

In paper and pulp alone, U.S. original investments and earnings in Canada have totalled more than one bil-



Alum tanks lined by B.F. Goodrich need no repairs in 20 years

THIS paper manufacturer wanted to cut costs by switching from powdered to liquid alum in their pulp mixture. But getting a tank to hold this corrosive solution was a problem. Wood tanks shrink, often leak. Lead-lined tanks require frequent repairs.

B.F. Goodrich engineers recommended Triflex rubber-lining for the two 5,000-gallon steel storage tanks. This lining is not one layer of rubber, but three—hard rubber for maximum corrosion resistance sandwiched between soft rubber for added protection.

Installed over 20 years ago, the two B.F. Goodrich rubber-lined tanks pictured here are still in excellent condition, have needed no repairs of either the lining or the metal.

In the past 20 years, we have lined hundreds of tanks for alum service, as well as more than 75 railroad tank cars, and thousands of pieces of pipe and fittings. While the initial cost of B.F. Goodrich rubber-lining is somewhat higher than wood or lead-lined tanks, the rubber-lined tanks do not leak, require little or no maintenance, and

are, therefore, much more economical in the long run. For more information, write *B.F. Goodrich Industrial Products Co., Dept. M-986, Akron 18, Ohio.*



... PAPER WEEK - OPEN INDUSTRY

lion dollars. Mr. Fowler recalled that the investments were welcomed by Canadians and were beneficial to Canada.

In his New York address, Mr. Fowler urged U.S. owners of Canadian companies not only to identify themselves with aspirations of Canadians but also to work to further them.

"It should be emphasized," he went on, "that this course should be adopted in the essential interests of the American company itself and not as a reluctant adaptation to Canadian public opinion. We need American investment in Canada and we welcome it when it becomes fully Canadian in its operations. But because of its size and power we fear domination if it does not become fully Canadian."

A smaller Canadian industry

would have resulted without American investment, Mr. Fowler declared. But it would be smaller in production, smaller in employment, smaller as a purchaser of Canadian services and goods, and smaller in its exports to the United States and other countries.

Competition was never so tough, says Whitaker

"We have never had so much competition as we have now," declared Howard E. Whitaker, starting his second year as president of the American Paper and Pulp Assn. during Paper Week in New York. He is chairman of The Mead Corp.

Strong pulp and paper companies have been unable to raise prices to meet costs, while weaker companies have been forced to make some price cuts—as a result "the profit-squeeze is going to be tougher," he predicted.

Surplus productive capacity is likely to continue at 10% or more, and 1961 will be much like 1960, he said.

Various expansion and modernization projects are being completed, some aimed to cut costs rather than increase production. Changes in depreciation provisions to allow for faster replacement of obsolescent equipment would help speed this trend, said Mr. Whitaker.

Research is three to five years ahead of foreign competitors, he said, helping offset their advantages of newer equipment and lower costs.

He pointed out that of the permanent labor force of 75,000 in Canada's pulp and paper mills something like 25,000 jobs are provided to Canadian residents by companies controlled by the United States. In addition, American-controlled companies employ 250,000 forest workers.

"A new mood of confidence

in the dollar" was reported by Dr. Kavesch, but he added "it would be foolish to conclude the problem has been permanently solved." His proposal for five steps to meet the effects of the gold crisis:

1. Exports should be promoted in every possible fashion. One way would be to push for lowered tariffs on American goods in foreign markets.

2. Military and economic aid programs should be carefully scrutinized. Aid to underdeveloped areas should be supplied more equitably, particularly by Germany and the rest of Western Europe.

3. Selective tax treatment on private overseas investment should be reconsidered.

4. Fiscal policy should be used more imaginatively in combatting recessions



Robert M. Fowler

to cope with outflow of short-term capital.

5. Every effort should be made to encourage production efficiency in American industry. Ultimately, the battle will be won or lost on this major issue.

"Devaluation is no solution,"

Dr. Kavesch said. "Rather, it would mean instability in international finance. Furthermore, it would be a cruel blow to the nations which have solidly supported us; while to the Russians it would mean windfall gains on their huge stocks of gold."

The speaker went on to say that for too long in the postwar era "America played a global game of economic poker," holding not only all the chips, but the cards as well.

"Thus we made grants and supplied goods, and our smugness reflected our economic supremacy," Dr. Kavesch asserted. "But in the past few years, Western Europe and Japan have made strong comebacks—to a great extent because of our aid programs. Aggressively, they underbid and undersold us in world markets and in America. For too long we dismissed these hints to increase our efficiency." ■

..... PULP CONSUMERS

Scandinavian cellulose mills to run full

with new capacity; North American producers will export more pulp

New York—But still there will be excess capacity in 1961. With new mills coming into production in Canada and abroad, pulp supply will be more plentiful in the later part of 1961 than in the current six months.

This conclusion capped the ninth annual report of Reed R. Porter, executive secretary-treasurer, to mem-

bers of Assn. of Pulp Consumers.

Three expansions in Canada this year—the new Celgar and Woodfibre mills and doubling of Thurso production—and the new Stora-Scott mill in Nova Scotia early in 1962—will add "over 450,000 tons" to Canada's paper grade market pulp supply, according to Mr. Porter. This, he added,

will mean a "continued rise in Canadian pulps in our furnish."

On the other hand, he said, partial integration of many U.S. pulp mills by mergers or acquisitions of former customers will reduce the U.S. supply.

Other major conclusions

from Mr. Porter's report: "We should



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the World's Pulp and Paper Industry



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... PAPER WEEK - PULP CONSUMERS

expect little in the way of growth in demand in 1961, irrespective of the trend in our economy as a whole. The effect of mergers will offset much of the possible growth elsewhere. As to supply, we still have some excess . . . particularly in sulfites, which will be augmented. All the new (1961) tonnage in Canada is bleached sulfate, increasing the 1961 potential supply by about 275,000 tons. Unless exports can be further increased, it would appear . . . 1961 will see increased pressure on the producers . . . a more selective market for the consumer.

World shipments began to climb

in 1959, increasing that year by over 400,000 tons, he said. Neither the U.S. nor Canada participated in the enlarged 1959 sales. But 1960 saw the European paper boom gather momentum. Total sales by these major producing nations jumped last year by over 750,000 tons. While the Scandinavian producers sold all they could (including over 300,000 tons from inventories over the two year period) they were unable to satisfy demand. Fortunately for U.S. consumers the North American producing mills had about one million tons of excess ca-

capacity; consequently, were able to supply 500,000 tons of the 750,000 tons of new demand abroad and still ship us all the pulp we needed at just about any time we needed it."

"Looking ahead 12 months

we find Swedish and Finnish producers frantically building new capacity. These two nations combined will enlarge their market pulp capacity in 1961 by slightly over 700,000 short tons. Much of it, however, will come in production late in the year.

"Analysis of each of their new projects, mill by mill, indicates that not over 250,000 tons of new capacity will be available in 1961, about 100,000 tons more than 1960. These two countries sold 220,000 tons more last year than in 1959, but 60,000 tons of it came from inventory. The current level of stocks suggests that they will not be able to sell much from inventory in 1961.

"Combining Scandinavian and North American supply, it looks as if about 500,000 tons of new market pulp will be available in 1961. In addition, North America has some excess capacity. Approximately 200,000 tons were lost by mergers in 1960. As

a rough approximate, therefore, it would appear that if demand increased at the 1960 rate in 1961, supply and demand would be just about in balance, as far as total tonnage is concerned. Diversion of dissolving tonnage to paper grade, of course, would enlarge the supply.

"From a strictly capacity view

without regard to financial and economic woes, we are safe in predicting a slowing down in the European pulp demand rate in 1961. All of the major consuming nations in Europe began 1960 with some excess papermaking capacity. They closed the year running full and with an order back log.

"Informed industry observers in Europe are privately predicting a leveling-off in 1961 with a growth rate of less than half that of 1960. If these forecasts prove true, it would mean Europe will require between 300,000 and 350,000 more tons of pulp this year than last. It should mean that the Scandinavian producers will run full, including much of their new capacity, and that the North American producers will export more pulp in 1961 than in 1960, but will still have excess capacity."

"America needs a workable philosophy"

NEW YORK—The great need for a workable, dynamic philosophy of living was pointed out by a former superintendent of schools and now a nationally famed public speaker, who held the Pulp Consumers luncheon at Paper Week in rapt attention.

Dr. Kenneth McFarland of Topeka, Kan., who spent 24 years as a Kansas school executive and now tours coast to coast as consultant for General Motors and advisor to many other business groups, was principal speaker at this Paper Week event on Feb. 22.

"The times cry out," he said, "for media through which the flood of facts in which people are drowning can be transposed into a philosophy of living."

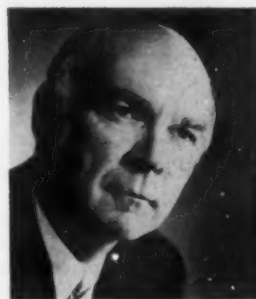
If the American system goes down it won't be an atom bomb that does it. "It will be," he said, "because we have developed a philosophy that says the individual is not economically responsible for his own welfare, nor is he morally responsible for his own conduct."

"Selling America" was the theme of Dr. McFarland's talk. Here are other highlights:

"Equality in America originally and truthfully meant equality of opportunity. Now it has been twisted to mean equality of achievement. The new meaning says every man is entitled to as many results as other people. He is no longer expected to take advantage of his opportunity and to earn results as an individual—he now expects to join something and demand results.

"Democracy originally meant the welfare of the majority must have preference. Now majorities are ruthlessly shoved aside by highly organized minorities who chant the slogans of democracy.

"We have gone completely overboard on the theory that society is responsible for all the sins of the individual. Eradication of poverty and slum clearance are classic types of answers for the problem of juvenile delinquency. Certainly the goals of eradicating poverty and clearing of slums represent worthy projects but there is no scientific evidence that these are answers to juvenile delinquency. The only answer is the full and complete acceptance of his own personal moral responsibility by every



DR. KENNETH MCFARLAND outlined need for "workable philosophy of living" in inspirational talk to Pulp Consumers.

individual regardless of his circumstances.

"This is the golden opportunity for trade associations and other leadership groups to constantly review and clarify the great, basic principles of liberty—to hold high the lamps that dispel the darkness of our modern mass living—and to constantly inspire our people to stand firm against the enemies of freedom."

Fluid Power news



Years of Fluid Power

From Oilgear Application-Engineering Files

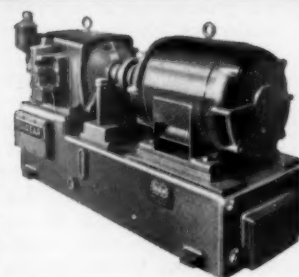
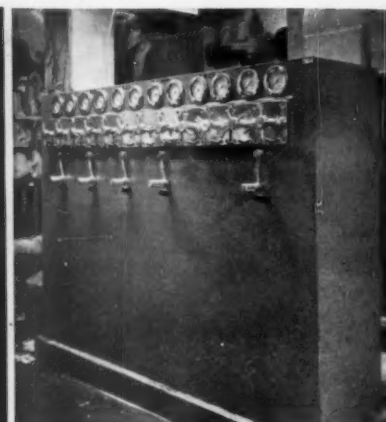
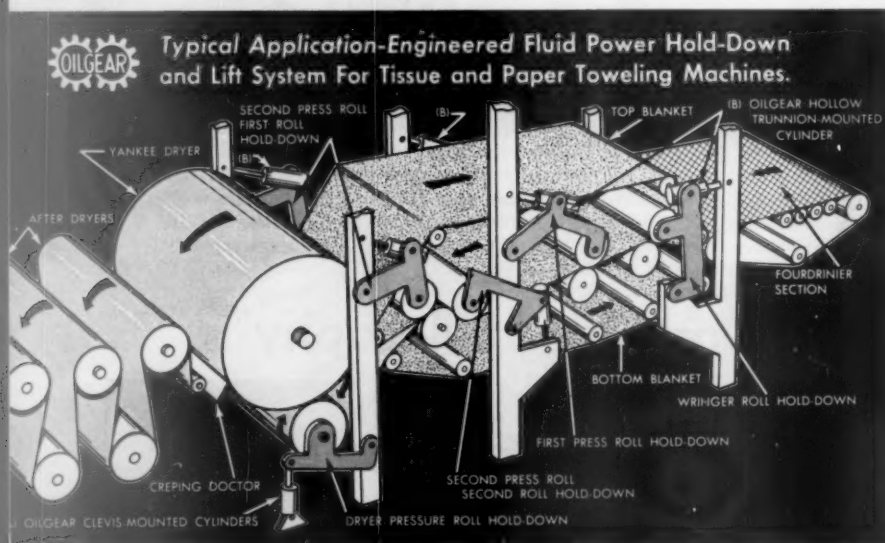
HOW OILGEAR HOLD-DOWN AND LIFT SYSTEMS INCREASE ROLL LIFE—IMPROVE PRODUCT QUALITY

SER: Scott Paper Company, Chester, Pa.; Everett, Wash.; Mobile, Ala.; Fort Edward, N.Y.

PROBLEM: To supply hold-down and lift systems for rolls on paper machines, paper coating machines, super calendars, laminating and similar processing machines—that can be accurately controlled from a simple remote control panel.

SER REQUIREMENTS: 1. Provide constant, uniform, pre-t roll pressures. 2. Smooth lowering and/or forcing of pressure rolls downward to avoid damage, such as fracturing or flattening. 3. Fast, easy, positive selection of such functions as "Lower," "Hold Down," "Release,"

"Lift," "Hold Up," "Off." 4. Accurately, infinitely vary the pressure on either end of each roll independently over a wide range, at any time, to balance the opposing forces created for most efficient machine operation and product quality. 5. A direct-reading, constant, visual indication of the pressure and force exerted on either end of each roll. In addition, the systems must be simple . . . clean . . . easy to install and maintain . . . facilitate replacement of worn rolls . . . trouble-free, dependable, heavy-duty, for continuous, 'round-the-clock operation.



SOLUTION: Oilgear Application-Engineered Hold-Down and Lift Systems consisting of Oilgear Heavy-Duty, constant or Variable Displacement Pumps that supply fluid power to Oilgear "Custom-Quality" Cylinders through separate Oilgear Valves on a remote control panel—provide smooth, positive motion and steady, pre-t holding pressures. Cylinders can be mounted directly, or through mechanical linkage, to pressure roll bearing ends. Simplicity of pump drive and installation keep machine cost at a minimum. Remote Control Panel provides fast, positive selection of all functions—operator can "Lift," "Hold Up," "Release," "Lower," "Hold Down"—at any time; accurately, infinitely vary pressure on either end of each roll independently, and have constant, direct-reading, visual indication of pressure and force being exerted at bearing ends of each roll.

ONE USER STATES—"The control panel indication is so accurate that a worn, 'off-balance' or out-of-round roll can be readily detected."

Another User Reports—"Oilgear is far superior to other systems . . . direct gage readings have enabled us to experiment with varying degrees of pressure on the rolls, so that we can operate with less pressure than we hitherto thought feasible. This has resulted in improved product quality and longer roll life."

Top Photo: One of the Oilgear Hold-Down and Lift System Control Panels as installed with each of Scott Paper Company's two, new tissue machines in their Southern Division Mill, Mobile, Ala.—symbolized in the schematic drawing, left. Daily production from these machines averages 200 tons of Scott's bathroom tissues, toweling and wipers for household and industrial use. **Right:** A typical Oilgear Heavy-Duty "Power-Pak"—Variable Displacement Pump, electric motor drive, and reservoir base—used with Hold-Down and Lift Systems.

Oilgear is no "stranger" in the paper industry . . . other Oilgear Linear Drives are in operation on pulp log splitters and pulp baling presses. Similarly, the highly efficient, long-life, Oilgear Heavy-Duty Variable Speed Rotary Drives are compiling enviable records on special purpose paper machine sections . . . on complete paper machines . . . on multi-color printing press drives . . . or unwinder and winder drives . . . on laminating and coating machine drives. It's well worth your while to consider Oilgear—"for the lowest cost per year!"

For practical solutions to YOUR linear or rotary motion problems, call the factory-trained Oilgear Application-Engineer in your vicinity. Or write, stating your specific requirements, directly to . . .

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... PAPER WEEK - PULP CONSUMERS

Wholesalers are helping to close gap of over-capacity in pulp and paper industry in America

NEW YORK—Paper wholesalers distributed a record-breaking \$3,142,004,000 worth of paper and paper products in 1960, said O. Glenn Leach, speaking at the Association of Pulp Consumers business meeting. Mr. Leach just two years ago took over the post of executive secretary of the National Paper Trade Assn.

While consumption of paper and paper products has been growing at the rate of 2.5% per year, there was some concern since the industry's productive capacity has been growing at an annual rate of 3.8% and this year it will hit 4.2%, he said.

Helping to close this gap, Mr. Leach pointed out, was the record-breaking distribution through paper wholesalers. "Distributors of fine and printing papers increased sales volumes by 3.92% in 1960 to a record of \$1,472,829,000," he said. Distributors of industrial papers also reached a new high at \$1,669,175,000, an increase of 0.61% over 1959.

Mr. Leach credited "stepped-up efficiencies and economies in wholesaler-distributor operations" as the reason paper merchants were able to increase their sales volume to an all-time high in 1960.



GLENN LEACH, executive secretary of National Paper Trade Assn.

..... PULP IMPORTERS

Pulp price "serious concern in Europe"

NEW YORK—Concern over pulp prices in Europe was a theme of an address by Per Westad, president of Assn. of American Wood Pulp Importers, and U.S. representative for the big Norwegian market pulp producer, Borregard AB. He spoke before both Pulp Producers and Pulp Consumers as representative of the Scandinavian producers. Scandinavian pulp prices in Europe recently were raised slightly (less than \$6), this following shortly upon contrasting reduction for North American pulps on the domestic U.S. market.

Mr. Westad said it is of serious concern in North Europe that wood and labor costs have "materially increased" and labor costs will be increased again in 1961.

Noting that pulp imports by U.S.A. declined slightly in 1960 from 1959, a drop of 50,000 to 2,390,000 tons, he pointed out that there has been a shift, however, in favor of more Canadian imports and less from North Europe.

Woodpulp output in Scandinavia has been fairly stable till recently, except for Finnish increases, said Mr. Westad. But now Norway and Sweden are back to pre-war levels and more pulp is being produced.

"Last year there was a forecast made for change involving an increase generally in the Northern European production," he continued. "Some of

this has just started to come into being and it is estimated that in the next four years an additional quantity of about 4,000,000 tons capacity will come into production.

"In Europe, the consumption of paper pulp increased considerably during 1960 and that market not only took the quantities available from the traditional European suppliers, but also absorbed increasing quantities from U.S.A. and Canada," he said. "The Northern European woodpulp industry capacity expansion increased about 500,000 tons during 1960. Some of this increase was due to modernization. Now, for the current year of 1961, the market woodpulp capacity should increase about 450,000 tons, which would originate as about 200,000 tons each from Sweden and Finland and Norway's estimates at about 50,000 tons.

"Norway doesn't have much in the way of scheduled plans for increases other than continual modernization. An exception is the possibility of a new mill at Kirkenes, in the Arctic region, which would be of a combined Norwegian and Finnish participation. Sweden's market pulp expansion would be about one million tons in the next three years and Finland has approximately similar tonnage plans."

Per capita consumption is up in existing as well as newly developed areas, said Mr. Westad. In addition,

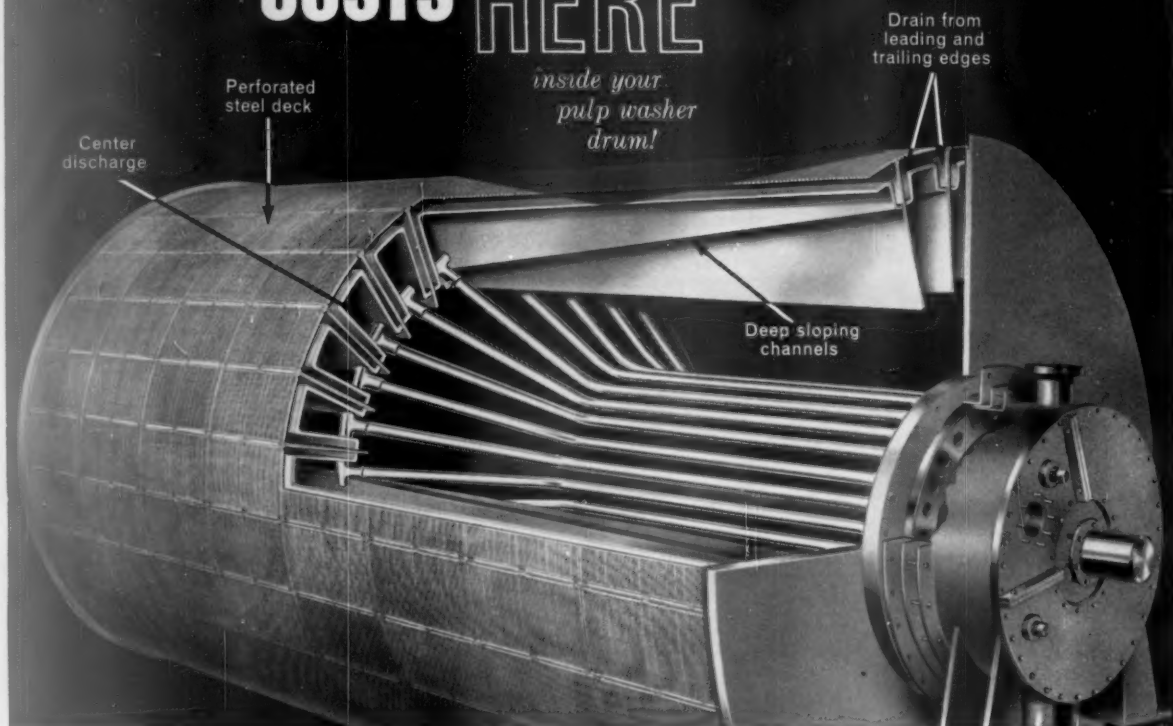


PER WESTAD, president of Assn. of American Wood Pulp Importers.

the world population growth will be about seven billion persons by the year 2,000, which is considerably more than double of the present world figures, he said.

"The cost problem may begin to be resolved during the coming year," he went on, "and it will also be noted there are definite trends towards further integration, both vertical and horizontal abroad, similar to the recent trend in the U.S.A. Therefore there should not be any material change in the forecasts, particularly as some of the new production schedules for Europe are of the so-called flexible type of tonnage. This, coupled with the increased demand, actually being experienced and also anticipated due to scheduled increased requirements, appears to give a sound basis for the current expansion programs."

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A better hydraulic system resulting in more effective use of drum surface is the principal reason why Swenson pulp washers require less dilution to obtain clean pulp. And lower dilution means lower evaporator costs.

Swenson pulp washers pick up a thicker sheet of pulp, permitting lower drum speeds and greater drainage time. The patented Swenson channels are sloped to the center with liquor drainage on both the leading and trailing sides. These features provide the most effective use of the drum area assuring low dilution operation.

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Wall Street has plenty of money to back any paper industry project "with lasting future"

NEW YORK—This hopeful prospect was the theme of an analysis given by a Wall Street spokesman, Lawrence K. Gessner, at the Pulp Producers annual meeting.

A business school graduate and known to many of the pulpmen, Mr. Gessner was in a position to talk from the Wall Street viewpoint. He noted that in ten years the paper industry's compound sales growth has been 5.7% and even better for "progressive" companies.

The earnings have been poor, he said.

Mr. Gessner said this industry is in a "very enviable" position as regards raw materials, productive facilities, labor, product, sales growth and stability, but was very weak in earnings. In ten years, he said, profits have grown at only 0.8% annually. Inflation, he said, was at the rate of 2.5%.

He said the industry should do six things:

(1) Keep costs down even when the cycle turns up so that the same profit margin pressure will be lessened in the coming years.

(2) Invest attention, time, effort and money in research and product development. The key word is "invest," not spend.

(3) When you consider expansion, consider that perhaps you are not that much better or smarter than your competitors. There is no certainty that you can get his market. He is awake too and will fight back.

(4) Consider capital expenditures mainly in terms of return on the dollar invested. You must be increasingly tough in your estimates.

(5) If integration really improves your situation in an important way, seek to achieve it. If not, forget it.



LAWRENCE K. GESSNER, Smith Barney & Co., reflected to the Producers the bullish Wall Street view.

(6) Additional money you need will be available when you need it because Wall Street will be convinced that here is an industry with a real and lasting future. ■

Gainsbrugh indicates better times ahead

NEW YORK—The current business "recession" may have reached its ebb, with better times in the offing. This was the opinion projected by National Industrial Conference Board chief economist Martin R. Gainsbrugh as he spoke before the U.S. Pulp Producers Association the opening day of Paper Week.

He based his observation on two factors: "The high rate of inventory liquidation" and "the strength of end-product demand." He cited a recent

survey of purchasing agents which indicates not only that inventories are coming into better balance but also that new orders are beginning to pass the current rates of production.

He added that end-product demand is strong in all sectors except private investment in new plants and equipment. Gainsbrugh also sees an optimistic effect in President Kennedy's creation of special tax incentives to stimulate investments in this area. ■



MARTIN R. GAINSBRUGH

..... TAPPI

TAPPI theme: Technical power

Shortage of technical men in the industry is top talk topic

By MAURICE R. CASTAGNE, Associate Editor

NEW YORK—Despite airlines strikes, a fog that rivaled even the worst London pea soup and a weatherman who had dumped unprecedented snows on this city, the Commodore Hotel's meeting rooms were well crowded again this year. The 46th annual TAPPI meeting got off, for many, to an unflying start, but by Monday noon

it was in full swing. Its halls were mobbed with familiar figures and its suppliers were mixing shop with swizzle sticks. But the most pertinent theme to come from the meetings was an apparent paradox: The shortage of technical manpower in the industry.

It presages trouble ahead, not only for the pulp and paper industry, but

for all U.S. industries that lean heavily on scientific manpower. Not only is industry making heavy demands on the scientific and engineering pool, but the problem is compounded by national defense efforts, an expanding economy, the needs of young, developing nations around the globe. Against these demanding factors is

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weighed the limited number of skilled men available and the new minds coming into industry each year from top technical universities.

Indicative of the high concern management is showing toward the problem was the fact that TAPPI scheduled an opening day symposium on better use of technical manpower.

Root of the problem

lies in the fact that as a nation we are trying to service the high birth rate population of the Forties with the low birth rate population of the Thirties. These were some of the ideas generated at the symposium by Dr. W. G. Torpey, consultant, Executive Office of the President, Office of Civil and Defense Mobilization, chairman of the symposium.

The low birth rate, he explained, occurred between 1932 and 1940, after which there was a gradual increase. As this "lean generation" of the 1930's completes college and moves into employment, there will be, by 1965, a decrease from 1955 of almost 750,000 men between the ages of 25-34 in the labor force. This is the age group, says Dr. Torpey, on which TAPPI will rely for young scientists and engineers.

Similarly, he says, in the decade 1965-1975, the U.S. will face an absolute decrease in men in the age brackets 35-44 from whom young executives and project leaders are drawn.

This puts a practical limit on the number of qualified young men who can be trained in scientific and engineering fields. The proportion of such men entering college, however, has increased rapidly in recent years and number of men in the 25-34 age group holding degrees in science and engineering by 1965 will be substantially greater than 1955.

Maximum use must be made

of the technical talent already available. To make the best use, said H. R.



THE TECHNICAL MAN: A major problem facing all industry is studied by TAPPI in important Paper Week sessions.

Beatty, Wentworth Institute, Boston, Mass., scientific and engineering work should be done on a team basis. This will enable those with special skills to be used fully at their highest levels. The top engineer or scientist then becomes a coordinator of the efforts of others as well as the leader in the research or engineering activity.

Through better use of junior scientists, junior engineers, scientific and engineering technicians, the top engineer or scientist can multiply his effectiveness, become more valuable because of his greater contribution to the success of the enterprise.

Engineering technicians, said Mr. Beatty, should be available to engineers and scientists in a ratio of two technicians for every engineer or scientist if utilization is to be most effective. Today, this ratio is seven-tenths of an engineering technician per engineer.

Expanded U.S. technical education to turn out an ample supply of well educated engineering men was also strongly proposed.

One solution to the problem

of a possible technical manpower shortage was detailed by J. Gammel, Allis-Chalmers, who explained the first five year plan of the Engineers Joint Council for Professional Development. Basically, this is the program: (1) Career orientation; (2) Continuing education; (3) Professional identification; (4) Responsible citizenship; (5) Selected reading; and (6) Personal appraisal.

Because of the rapid development of science, the problems of adapting a particular capability to a particular task (both of which are changing rapidly) is formidable, he said. Learning a job after landing it may be routine, he said, keeping it is not. The half-life of an engineer's education is said to be 15 years. If this is true, said Mr. Gammel, the technical deterioration of a man's education is at the rate of 3%/year. If we are not to lose this technical capability, he said, a constant effort must be made to keep people abreast of the times and also working on those jobs for which they continue to be best fitted. These efforts must not be left to chance nor made exclusively dependent on good motivations or the judgment of young engineers. It must also be purposely planned and fostered by responsible executives.

A second solution to the problem

was outlined by C. B. Munton and G. J. Wilson, National Cash Register Co. They presented 7 motivation factors which cause scientists to seek the administrative ladder: Salary; recognition aspirations; obsolescence of technical knowledge; communications; authority; shortage of engineering administrators and misuse of talent. ■

"Well done but let's do better"—Chidester

NEW YORK—"I assure you, no one who has preceded me in receiving this award has experienced a deeper sense of humility than I." As he said this, Gardner H. "Chid" Chidester, chief, U.S. Forest Products Laboratory, was ushered into the select circle of TAPPI Gold Medal recipients.

As Mr. Chidester stepped up to the rostrum to accept the Gold Medal from his long-time friend and asso-

ciate, R. J. Seidl, director of the Central Research Laboratory at Simpson Timber Co., he said:

"Whatever I have been able to do to merit this honor is very largely the result of my fortunate association with a staff of able workers and the organization I represent, the U.S. Forest Products Laboratory. I accept this award on their behalf as well as my own." As he paused for a sip of water

a technical director in the audience leaned over and whispered to his table companion, "Just like 'Chid' . . . always giving credit to someone else."

Reaching a high point in his acceptance speech, Mr. Chidester launched into a challenge that industry and government face. "Production costs are a major element in the overall competitive situation . . . they will determine how well pulp and paper

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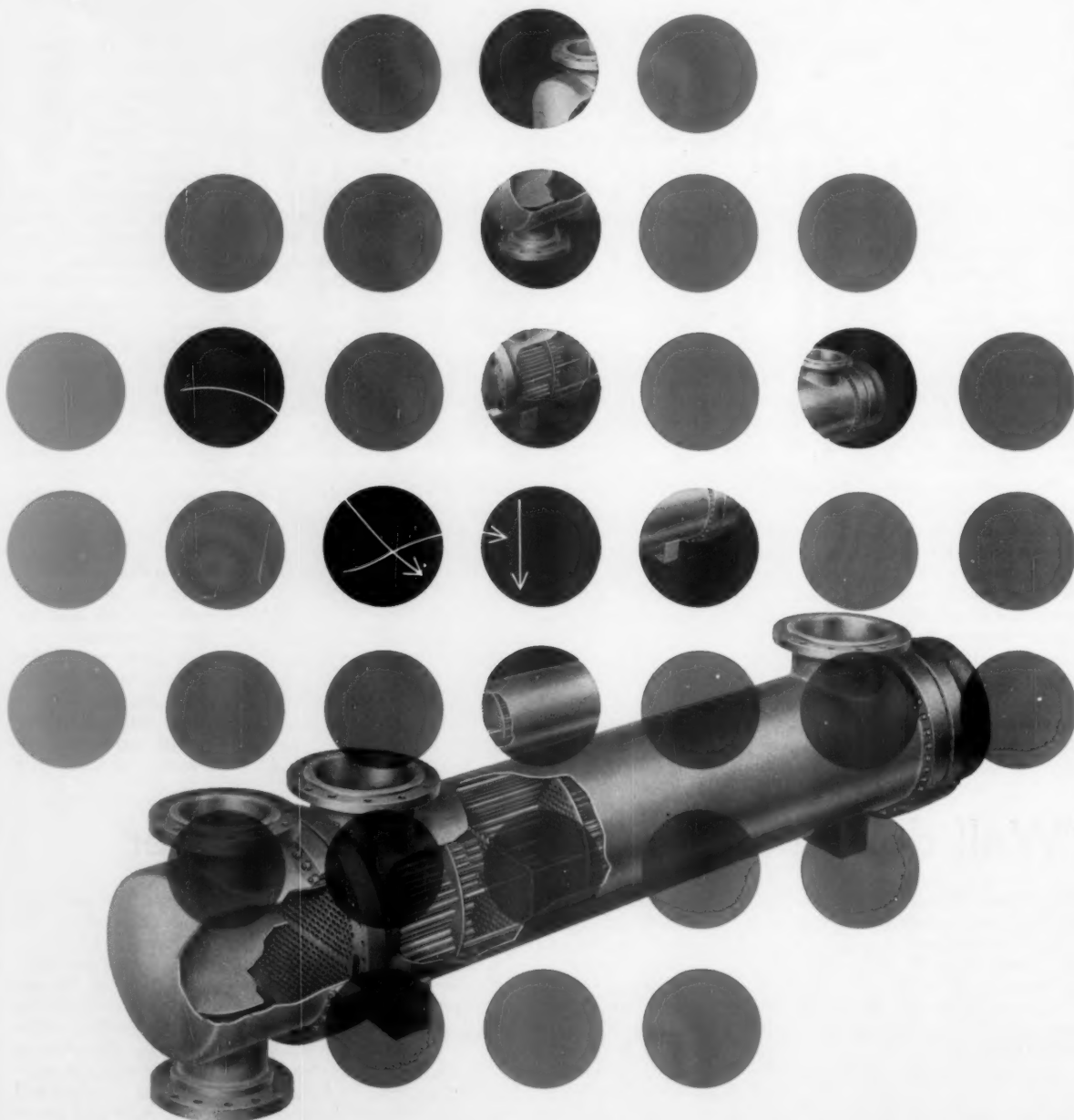
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products meet market challenges.

"Pulp processes have been considerably improved, particularly in engineering aspects. Significant progress has been made in attaining higher yields and in accepting a greater variety of species. Retention of lignin in paper or paperboard probably is the most valuable use of lignin in substantial quantity we now have. It is doubtful whether we have reached the ultimate tolerance for lignin in finished products with correspondingly higher yields.

"Basic chemical pulping processes are much the same today as they were originally. Progress in attaining real improvement in this area has been something less than spectacular. It is doubtful whether the combination of even the most commonly used chemicals, sodium and sulfur, have been fully explored.

"We should get much higher yields of delignified pulp with as much strength as the best available and improved bleaching characteristics.

"We need a much better under-

standing of the fundamental chemistry of delignification . . . potentials for savings through higher yields and improved quality are large and worth more effort.

"We need much more information on fiber structure, and bonding . . . it is not inconceivable that, if we knew more about the fundamentals of sheet formation, a quite different paper machine, operable at higher speeds, would result. Such work has been started and the results could be spectacular."

"Bag" liner protects digester

NEW YORK—Existing digesters may now be field-lined without welding the lining to carbon steel. The new method, called the Kopparfors bag lining method, protects the inside of the digester operating under cyclic conditions of temperature and pressure. Large thin sheets of suitable corrosion resistant metals are welded to stainless sheets with the liner anchored to the digester at a few key points. A vacuum between lining and wall holds the sheathing flush to the wall.

Some 25 digesters, 5 hot acid tanks and 5 digester domes have been lined

with the Kopparfors lining in Sweden, Austria, Germany, Finland, Morocco, South Africa, Japan and the U.S.

Remaining joints in the liner are free of attachment to the vessel. The lining is further supported by pressure bulging the lining over a pattern of 2 in. dia. by 1/4 in. thick steel buttons welded to shell at 2 ft. intervals and by maintenance of vacuum.

Under variations of pressure and temperature, an austenitic lining may expand or contract radially and axially. When temperature and pressure are high, the lining is in tight con-

tact with the shell and in a state of compression. While the shell remains hot, the lining may be cooled by filling with cold chips. Axial tension develops by reason of retention by buttons and by the girth attachment joints and nozzles where banding produces added tension stresses equal to 182% of the hoop stresses at the weld.

Reporting on this new method: R. A. Menges, Vulcan-Cincinnati; A. H. Ahlstrom and I. Olsson, A. B. Nordstroms Linbanor, Stockholm, and G. Cape and A. M. Bain, Dominion Bridge Co., Montreal.

NSSC recovery for acetic, formic acids

NEW YORK—Sonoco Products Co. at Hartsville, S.C., has operated since 1958 what is said to be the world's first chemical plant for commercial production of acetic and formic acids from NSSC pulp mill black liquor. Besides being a commercial success, the plant eliminates the mill's NSSC black liquor stream pollution problem.

Basically, the process consists of concentration of black liquor to 40-45% solids followed by approximately stoichiometric acidification with H_2SO_4 to liberate the acid and formic acids from their sodium salts. This acidified liquor is solvent extracted counter-currently with 2-butanone to recover the acids product. The mixed acetic and formic acids are separated by azeotropic distillation with ethylene dichloride.

Both acids are refined for sale the acetic product being glacial (99.5%) and the formic product being 90% acid. The raffinate from the extraction is sold to kraft mills for its saltcake value.

The Sonoco plant has operated a hardwood NSSC mill since 1933, producing 150 tpd of 9-pt. corrugating board on one Fourdrinier. In addition it produces about 400 tpd of board from waste papers on 8 cylinder machines.

The mill had been returning white water from these operations to the Black Creek which has an average flow of 200 million gpd.

B.O.D. from this amount of white water along with other plant effluent

ACETIC ACID FROM NSSC pulp mill black liquor is made here by Sonoco Products, world's first chemical plant for this product, says company.





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Trial runs can be set up in your plant by Dow technical personnel. For full details, just call your nearest Dow sales office.

paper processing chemicals

VERSENEX 80

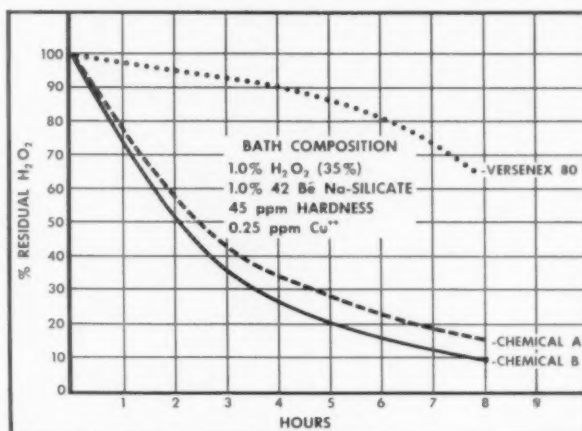
SAVE UP TO \$3.50/TON IN GROUNDWOOD BLEACHING, IMPROVE BLEACHING EFFICIENCY WITH VERSENEX 80

Actual mill use is showing substantial savings in bleaching costs by the addition of Versenex® 80 chelating agent to groundwood pulp before bleaching. In some cases, brightness levels are maintained with less peroxide when Versenex 80 is used as a pretreatment. In others, gains in brightness are achieved without increasing peroxide concentration. In either instance, the cost per point of brightness is lowered.

Improvement in the bleaching process with Versenex 80 lies in the fact that peroxide bleach liquors are subject to rapid decomposition. In groundwood bleaching, some 20-30% of the effectiveness of the bleach liquor is "lost," mainly because of the catalytic action of heavy metal ions present in the liquor. Inactivation of these ions by Versenex 80, before the bleach tower, extends the effective life of the peroxide. As a result, savings of up to \$3.50 per ton in chemical costs are being realized in actual mill operation.

A comparison of Versenex 80 with other commercially available aminocarboxylic acids is shown in the graph at right. Versenex 80 pentasodium salt of diethylenetriaminepentaacetic acid is shown to be significantly superior to either tetrasodium salt of ethylenediaminetetraacetic acid (chemical A) or trisodium salt of N-hydroxyethylethylenediaminetriacetic acid (chemical B) for this application.

Where stray metal ions are causing reversion,



scaling, and other bleaching problems, investigate Versenex 80. For more technical information or for a trial run in your own plant, call your nearest Dow sales office or write us in Midland.

NEWS ON MILL SAFETY

is being made by another Dow product—Chlorothene® NU. It's a cold-degreasing solvent that has no fire or flash point measurable by standard methods and has low toxicity. It may be used by spray, dip, or wipe methods. You can use it safely to clean instruments, oily or greasy parts, calender stack rolls, most electric motors, and in the removal of pitch from the wire. Ask for complete information on this new safety solvent for your maintenance cleaning.

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was about all the stream could tolerate and sustain fish life. Consequently, it was forced to impound NSSC black liquor in lagoons a mile or so from its plant in a sandhill, wooded area. But the liquor in these pits fermented badly during the warm season producing foul odors. What's more, the lagooned black liquor containing a large part of the original B.O.D. percolated through sandy soil back to Black Creek.

Sonoco's NSSC pulping has been principally from black gum, sweet gum and tupelo hardwoods with relatively minor amounts of poplar, elm, oak, etc. Cooking to yields, its black liquor dissolved solids have a B.O.D. of about 400,000 ppm, dry solids basis or about 300 lbs of B.O.D./ton of pulp. Approximately 50% of this B.O.D.

is due to sodium acetate and sodium formate. The remainder is due to wood sugars, fats and resins. Lignin sulfonates do not appear to make a significant contribution to the standard five day B.O.D.

With the commercial success

of the first installation of the Sonoco recovery process at Hartsville, and with the experience gained in design and operation of the plant, it is possible, says Sonoco, to build and operate a recovery system of this type successfully to dispose of NSSC black liquor stream pollution problem.

The economic justification for such a plant where not integrated with total chemical recovery or with kraft production, is doubtful, says Sonoco, except for very special situations dic-

tated by economic geography, such as their own case.

It is possible, they say, that by-product values may develop from this process which may alter present un-integrated restrictions.

The by-product is commercially unique, says Sonoco, and might be called the hardwood equivalent of tall oil. It is quite different, however, although they both contain fatty acids.

Capital cost to process

black liquor from a 350 tpd mill is \$1,500,000. Value of products: \$6,000/day before freight and sales costs. Total manufacturing costs before steam and power, but including depreciation: \$2,000/day. This leaves a margin of \$3,000/day to pay freight and sales and administrative costs. ■

Radioisotopes trace chip course

NEW YORK—Using 10 radioactive plastic chips, St. Regis Paper Co. was able to trace the course of chips in the two Kamyr continuous digesters at North Western Pulp & Power Ltd. at Hinton, Alberta.

Reporting on the tests was Richard P. Hamilton, group leader, pulping research, technical division, Deferiet, N.Y. He said that there was no spiraling or rotation of the active chip during descent through the main part of the digester. All chips came down in a vertical line. Some rotation was noted at the bottom of No. 1 digester just above the entry to the blow line.

No evidence of channeling

was noted in the tests. Data recorded indicated no definite pattern of velocities being higher near the center of the digester or lower near the shell. No correlation was found between chip depth and dwell time.

The program was successful, reported Mr. Hamilton, in obtaining data to prepare an average temperature vs. cooking time schedule of the Kamyr digesters at Hinton. This schedule then provided a basis for laboratory studies in a batch digester using the continuous digester time-temperature conditions.

Results obtained during operation at a low chip level in the digester pointed out the importance of maintaining a high chip level to obtain maximum and proper benefit of the swell time available.

The isotope used as a source of radiation was lanthanum 140 and the path of the active chips was traced with ion chamber hand instruments and an automatic Geiger counter.

Tracing with suitable radioactive isotopes, said Mr. Hamilton, is a valuable method of studying continuous flow of materials through a vessel such as a continuous digester. ■

Corrugator sheet length and register control

NEW YORK—To reduce scrap at the printer slotter and lay foundation for running of preprinted liners, Hygrade Containers Ltd., London, Ont., installed a corrugator sheet length and register control.

The corrugator cut-off knife drives from a main drive motor through a Reeves variable speed transmission to a cyclic crank that is connected directly to the knife cylinders. A planetary differential was inserted between the Reeves drive and cyclic crank. This differential has a second input, a small driving motor. This motor can increase or decrease the speed of the knife and compensate for sheet length variations.

A board speed tracking wheel installed just before the cut-off knife

generates pulses which are proportional to the web advance and which are transmitted to a digital computer. A similar pulse or signal generator is on the cut-off knife drive just before the cyclic crank. It transmits signals to the computer indicating the actual knife speed.

In operation, pulses from the board generator are positive and are continuously being added up by the computer. Pulses from the knife generator are negative and are also being continuously added by the computer. When total negative pulses are equal to positive pulses, board speed and knife speed are properly balanced to give the exact sheet length. If, however, total positive pulses exceed the total negative pulses, then it is an

indication that the knife is traveling too slow and coming long. The computer then activates the differential to speed up the knife and bring the sheet length to its correct length.

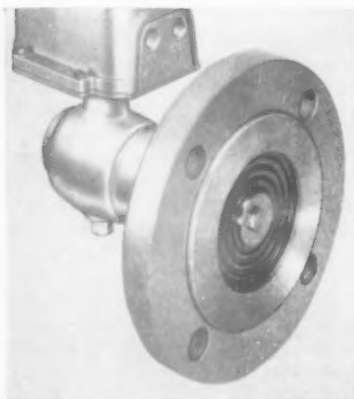
Similarly, if negative pulses begin to exceed positive pulses the differential motor slows down the knife. This slight correction occurs between cuts and therefore the sheet length is continuously maintained.

In regular operation the differential motor can increase or decrease sheet length plus or minus 3%. An added feature of the system, explained by Hygrade's J. C. Thompson enables Hygrade to preset sheet lengths, make the change and have the knife pull in to an exact cut without any manual jogging. ■



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All wetted parts of the 13FA Liquid Level Transmitter diaphragm capsule are of 316 stainless steel. Special coatings, for additional corrosion protection, are also available.

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plug up are eliminated. Output air signal goes direct to standard 3-15 psi receiver-recorders.

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LIQUID LEVEL TRANSMITTERS

Clay: "Substitute confidence for fear..."

NEW YORK—"We cannot afford fear for fear is unbecoming to the privilege of being an American." This was Gen. Lucius D. Clay, chairman and chief executive of Continental Can Co. and retired World War II hero speaking. He was calling on business men to help stimulate economic recovery with confidence, not fear.

As headline speaker before the Salesmen's Assoc. of the Paper Industry meeting, he commented on a range of topics, but his approach was both realistic and optimistic. "I can't see any other future for our industry but

growth," he said. "We can't go any way but up. . . ."

On over-capacity:

"Realistically, excess production capacity doesn't frighten me—we should always have more capacity than demand. Our trouble is that for many years we were lucky enough to have an excess of demand over capacity."

On loss of prestige:

"It would be well to remember that prestige, in its original meaning, was an illusion. As other free nations grow stronger, this prestige must diminish. The friendships we have made in help-

ing the free nations regain their stature is worth far more than the prestige we had when they could neither help themselves—or us."

On our relationship with Canada:

"It is very comforting to have a neighbor like our neighbor to the north which, although we may be having some economic difficulties right now . . . is a good neighbor, and the Lord have mercy on anyone who tries to come between us. . . ."

After the last comment, Gen. Clay received a roaring ovation from the Waldorf's packed main ballroom. ■

.....SULPHITE PAPER

"Soggy" months ahead, but '61 will set record

NEW YORK—The year end is going to be much better, so much better that 1961 will surpass 1960, said Dr. Dexter M. Keezer at the annual luncheon of the Sulphite Paper Manufacturers Assn. at the outset of Paper Week.

Dr. Keezer, former president of Reed College in Oregon, held important government posts during the war, as deputy administrator of OPA, advisor to the London Economic Mission, and member of the War Labor Board. He is now economic advisor for McGraw-Hill Publishing Co.

Don't join "the hair-shirt cult" warned Dr. Keezer, seeing some signs that the Kennedy administration may lean toward "sacrificing instead of consuming."

"We will be in fatal trouble if we go back to the simple life. We would wreck this economy. There's no escape from being very rich."

If the government is wise it will not experiment with tax cuts which might touch off financial jitters which would upset the delicate balance of payments overseas, he said. "A good recovery is in the making but there is danger of the government doing too much and talking too much."

He said under the United States system this country counts more unemployed than any other—for example, every graduate is an unemployed person as soon as he is handed a diploma.

A good recovery at the end of the year will bring the volume of business to a record 512 billion dollars as compared with 503 billion last year, he predicted. Even with over-capacities, investments are holding up well and a good sign is that \$11 billion is being spent to research new products. Even though consumers are well stocked with debts as high as they want them,



DR. DEXTER MERRIAM KEEZER, economic advisor to McGraw-Hill, took bright view of future in talk to Sulphite Paper group.

he said, we are not going to take off on a buying holiday. "In a few months business will turn around and start up," he said. ■

.....PULPWOOD

APA probes long range trends

Studies future woodlands organization, costs and public relations

NEW YORK—Departing from its traditional evening meeting of the forest policy forum, the American Pulpwood Assn. this year scheduled a full afternoon session. Its theme: The company executive looks at his woodlands organization.

Setting an overall mood for the meeting was John R. Kimberly, chairman, Kimberly-Clark Corp., whose

major responsibility is pulpwood. He stressed long-range trends.

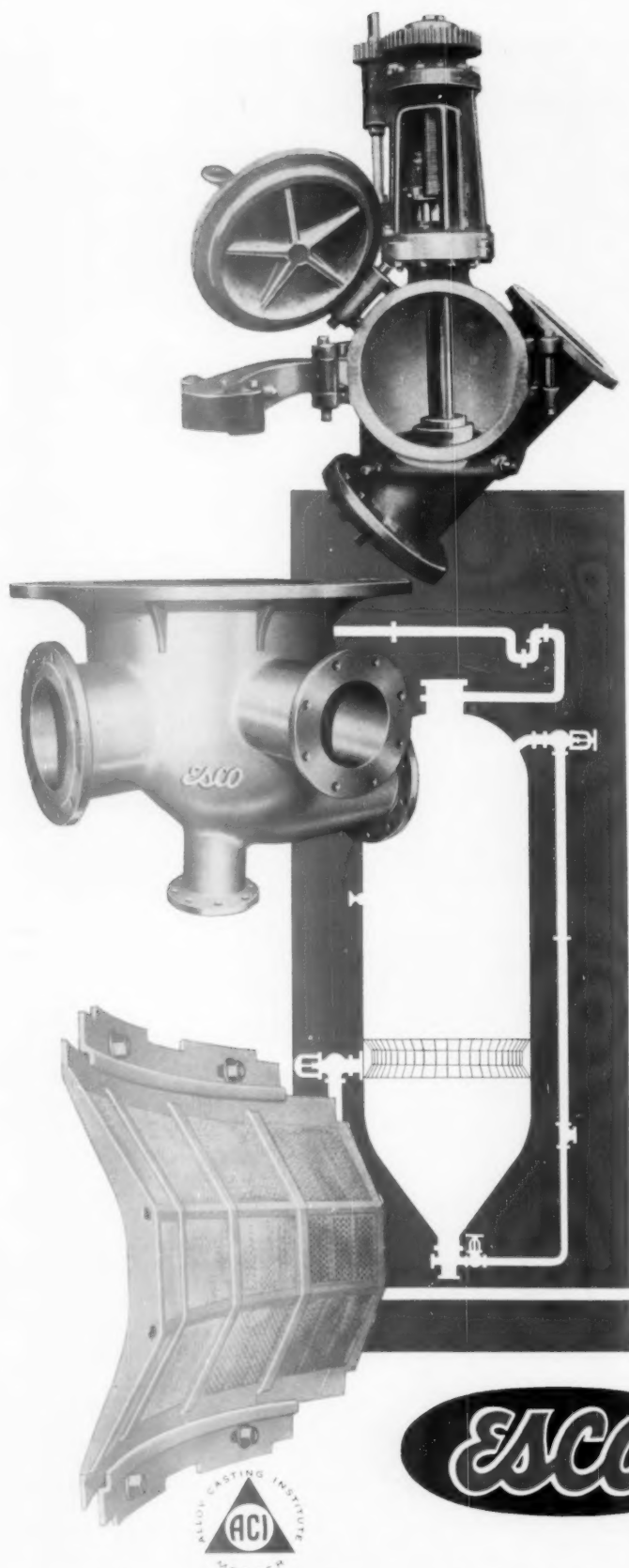
"Forest growth is predictable," he said, "economic growth is not." He defined economic growth as the increase in national productivity per capita, and said this was the real secret behind this growth. Time and again he underlined the need for raising the per capita productivity.

The payoff question

said Mr. Kimberly, is can the U.S. achieve faster growth rate if it wants to. He cited other needs, i.e., expanded educational programs, more equitable tax structures as solutions.

There is also a need for better planning by the industry for optimum timing for new expansion.

Increased competition tempo will



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... PAPER WEEK - PULPWOOD



JOHN R. KIMBERLY



T. T. DUNN



JOHN L. TOWER



J. W. McSWINEY

affect the long range outlook, he stated. Competition especially from other industries will be a major factor, he said, citing the growth of plastics and the possibility that other areas than packaging may be lost to plastics. The real threat, he stated, is that while plastics costs go down, paper costs go up.

New Markets must be developed by the industry on a continuous basis. The industry must find out what additional "built-in maid services" it can supply to the housewife. There must be intensified research programs, research and development, marketing and economic variety.

The industry must develop these future markets so that they will be large enough to offset loss of other markets, or markets that will become saturated, said Mr. Kimberly.

In closing his talk, Mr. Kimberly stressed the importance of people with creative talents, and said the great problem was to unleash the potentials of these creative energies to develop new markets and products.

The type of woodlands staff

or organization needed to meet future demands, was explained by T. T. Dunn, executive vice president, Union

Bag-Camp Paper Corp. Growing and harvesting of pulpwood differs greatly today from past years when "horse trading" sufficed because values were low. He predicted radical changes coming up; changes that command scientific forest land management, efficient methods of harvesting, close utilization of the forest crop.

An atmosphere of understanding

and approval on the part of the general public makes it easier for companies to perform their complex functions, said John L. Tower, vice president, International Paper Co.

The challenge, he said, is not of counteracting adverse opinion regarding activities but of overcoming the widespread lack of public knowledge of the industry and misinformation regarding it. He recommended a "grass roots" approach to the problem.

"The forestry organizations of the industry present a unique corporate asset in this field of public relations. The organizations are in the field meeting, advising and helping people, buying from people every day." In carrying out these activities, he said, they become identified as part of thousands of communities across the nation.

"In my opinion," stated Mr. Tower, "these communities should be the focal points for the industry in its efforts to create a favorable climate of public opinion. The men who are in charge of these operations must realize they have a primary public relations responsibility; that they are the paper industry and their companies in these communities; that people in the communities will tend to judge their companies by the men they know and judge the work of the companies by what they see."

Long range relationships

of pulpwood costs to the rate of return on products products, was explained by J. W. McSwiney, vice president, The Mead Corp., who suggested a realistic appraisal of pulpwood costs to include breakdown by stumpage, labor and transportation. He goes further. Well managed forest lands can approximate—and sometimes exceed—the return on investment in plant facilities.

"If the present planting of 1,500,000 acres of forest land continues in the South, an adequate supply of wood fiber will have its stabilizing effects on costs in this area," said Mr. McSwiney. ■

... WRITING PAPER 100th

APPA ends meeting on festive note

NEW YORK—The traditional final event of Paper Week—the annual APPA dinner in the Waldorf's Grand Ballroom on Thursday night, Feb. 23—was transformed this year into a gala celebration of the centennial of the Writing Paper Manufacturers Assn., which boasts of being the oldest trade association in America. A minimum of speeches mixed with classy nightclub entertainment were highlights.

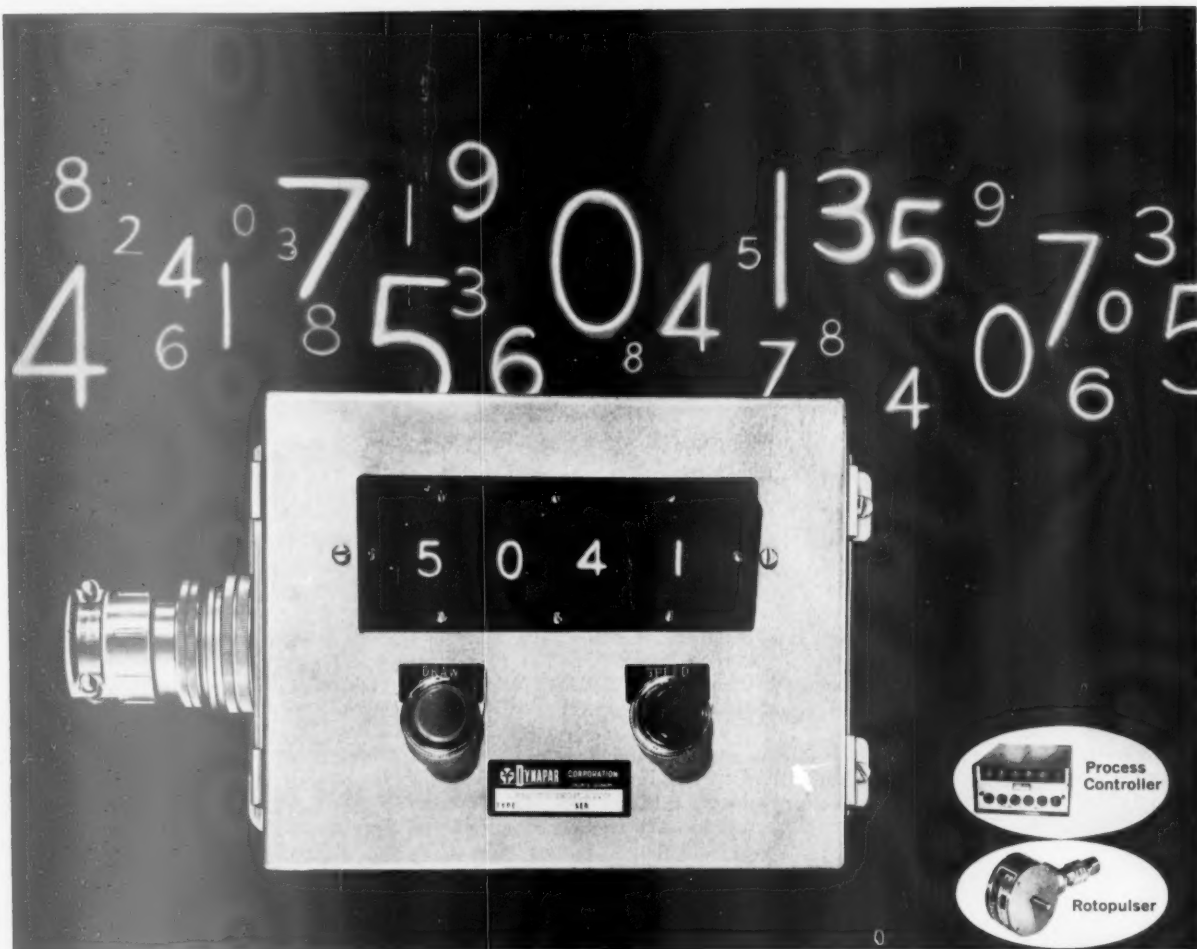
President Kennedy and ex-President

Eisenhower sent their tributes. In a telegram, the new occupant of the White House praised "the vitality of your organization and your industry" and said this vitality was "attested not only by the century of useful service but also by the fact that several of your present member firms are also among your founders." (Actually, four of the association's original 21 members in 1861 are still included in the present membership of 82 compa-

nies. These are Crane & Co., Hurlbut Paper Co., Parsons Paper Co. and Southworth Co., all of New England.)

The gala fun-program was a welcome relief to many pulp and paper industry executives, who admitted dozing through the long discourses of "semi-pro" orators and politicians in past years. A Fred Waring choral group featured the big show.

Dwight Eisenhower's tribute was a plaque which described the WPMA



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... PAPER WEEK - WMPA 100th



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W. R. M. WATSON

as a "pioneer in the trade association field . . . which advanced the progress of their membership and contributed to the economy of the nation." It bore his signature, but was a "salute" from the entire APPA. President Howard Whitaker and Executive Secretary Robert O'Connor of APPA presented it to Arthur E. Crane, president of WPMA, and its veteran executive secretary, Morris Dobrow. Mr. Dobrow has served the association 45 years and has been its executive secretary for 23 years and is still going strong.

Mr. Crane, fifth generation president of Crane & Co. Inc., and Norman W. Wilson, ex-president of Hammermill Paper, and oldest past president of the association, were other speakers who made their remarks cordial, short and in tune with high good feeling which ended another successful Paper Week.

The actual anniversary date, Tues., Feb. 21, was observed at the business session of the association. William R. M. Watson, youthful president of a small mill in Scotland, who recently completed his term as president of the

British Paper & Board Makers Assn., brought greetings from the United Kingdom at this meeting. Here Mr. Dobrow made his annual report and Prof. Raymond Rodgers of N.Y. University, discussed the business outlook.

Don Leslie, a former president of APPA, was elected to succeed Mr. Crane as president of the Writing Paper Mfrs. Assn. He is also president of Hammermill Paper Co. Elected vice presidents of WPMA were Walker J. Hosmer, Millers Falls Paper Co., and Gerry E. Veneman, Nekoosa-Edwards Paper Co. ■

... OTHER INDUSTRY NEWS

Rayon still has factors in its favor

in battle with nylon for tire cord market, despite price increase

NEW YORK—A recent increase in price of high tenacity rayon tire cord by two cents a pound led some tire industry spokesmen to predict this might weaken the now strong defenses of rayon cord—made from wood cellulose—in its battle for favor against nylon. At stake is a \$300 million market.

However, inquiries by PULP & PAPER have uncovered some other developments which may give an opposite

turn to the events. It was learned that prominent automobile companies are considering going to 2-ply tires, with a stronger form of bondage, and this would be favorable to rayon rather than nylon. The poundage of tire cord would be the same as in present 4-ply or 3-ply tires.

Israel Rogosin, chairman and president of Beaunit Mills Inc., also boosted the morale of dissolving wood-

pulp producers when, on leaving for a trip abroad, he said his companies would sell all the rayon they can make.

While domestic production of rayon and acetate, virtually all made with wood cellulose, declined 12 1/2% last year, the world production showed an overall rise of 2% (including U.S.A.) and it is expected to show a 3% increase in 1961. ■

New pulp, paper mills studied in Canada

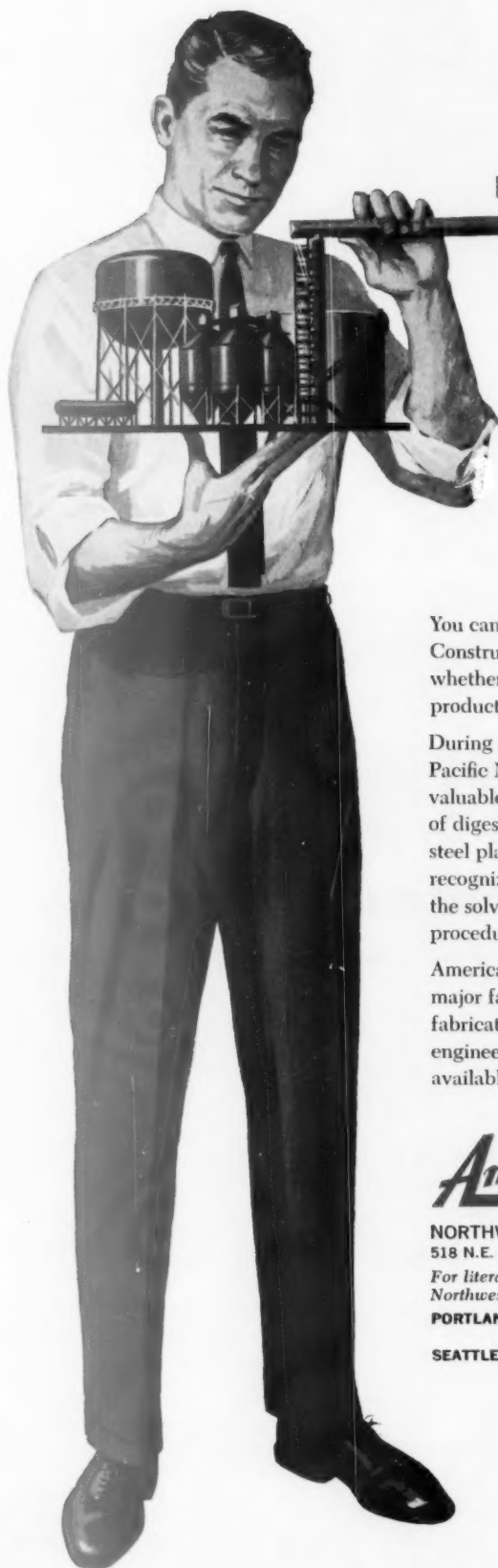
VANCOUVER, B. C. — Newfoundland's Premier Smallwood hasn't given up the idea of having a third pulp or paper mill launched in his province. When the Newfoundland legislature opened its 1961 session recently, it was announced that timber limits are being re-drawn to provide for such a mill. The existing mills are those of Bowater's Newfoundland Pulp & Paper Mills at Corner Brook and Anglo-Newfoundland at Grand Falls.

This is the eighth time that Newfoundland has tried to attract capital for a new mill. Most recent prospect was Crown Zellerbach Canada, which made a survey but decided not to expand in that area.

Spokesmen for the industry in Eastern Canada believe a newsprint mill would have a better chance than a pulp mill in view of prevailing market conditions, and with a seven-day week likely to materialize in New-

foundland and other eastern Canadian mills soon substantial capacity would become available to meet current requirements.

Negotiations appear to be moving satisfactorily toward establishment of pulp mills in Alberta by Alberta West Forest Products Corp. and Alberta Pulp Mills, Ltd., according to Hon. A. Russell Patrick, minister of industry and development in the provincial



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... OTHER INDUSTRY NEWS

government. He told PULP & PAPER that Alberta West, represented by Gordon McNabb, appears to the government to be "on the verge of active development."

"While we are not in a position to give any definite assurance," states the minister, "we fully expect to see it

launch into active construction in 1961. The other company does not seem to have developed quite so far but I wish to emphasize that these things are hard to predict."

In addition to these two projects, Canadian Forest Products, of Vancouver, B.C., announced several months

ago tentative plans for establishing a pulp mill and integrated forest industry at Grand Prairie, Alberta, where it already operates a plywood plant. CFP operates a 300 ton kraft mill at Port Mellon and large sawmills, plywood and shingle plants in British Columbia. ■

A familiar story: Sales up, profits down

THREE MAJOR PAPER PRODUCT companies have reported increased sales for 1960, but in all three cases profits were off from 1959 figures as a result of the cost-price squeeze.

Union Bag-Camp Paper Corp. reports sales of \$213 million last year, based on a preliminary annual report. Its net sales in '59 were \$203,912,533. Net income for '60, after taxes, was about \$18.6 million compared to '59's \$19.7 million. This amounted to \$2.39 per share on Union Bag-Camp's 7,773-327 shares as against the 1959 return

of \$2.54. The financial report included results of River Raisin Paper Co. which Union Bag-Camp acquired by merger in May.

Thilmann Pulp & Paper Co., Kaukauna, Wis., a leading producer of specialty wrapping papers for industry and business, totalled \$33,704,345 last year, as compared to \$33,467,838 for 1959. The profit picture was much the same as other companies are reporting: A decline in earnings. Said Thilmann board chairman G. E. McCorison, "One of the basic problems

of the paper industry lies in the fact that . . . price levels yield a good return only when the mills operate machines at full capacity. When volume dips slightly . . . mill profits drop . . . sharply."

Sales of Bemis Bro. Bag. Co. reflected the same picture. Sales for 1960 were \$131,651,312, net income was \$2,869,328, a sales increase of some \$400,000 over 1959 and a net decrease of about 5%. Per share earnings: \$4.03 a share in 1960, \$4.24 per share in '59. ■

... PEOPLE

Anglo Paper names new officers

MONTREAL—Dr. Allan C. Hill has been elected president of Anglo Paper Products, Ltd., world-wide sales organization for products of Anglo-Canadian Pulp and Paper Mills, Ltd. and of Dryden Paper Co. Ltd. Dr. Hill, who had been executive vice president of Anglo Paper, joined Anglo-Canadian in 1937. He is a past chairman of the Technical Section of CPPA and past president of American Assn. of Wood Pulp Importers of New York. He received a ph.d. degree from McGill Univ.

Two new vice presidents—Victor R. Coudert Jr. and Roland N. LeClair—have been named for Montmorency Paper Co., Inc., the U.S. sales and service representative for Anglo Paper Products. Mr. Coudert had been East-



ALLAN C. HILL



V. R. COUDERT Jr.



R. N. LeCLAIR

ern sales manager for Anglo and Dryden products in the U.S., after having served customers in the Midwest. He is a graduate of Yale (1946) and Harvard Business School (1950).

Mr. LeClair had been Midwest sales manager for Anglo since 1956. Previously he was personnel supt. for Anglo-Canadian at Quebec City, and with Consolidated Paper. ■

New Weyerhaeuser pulp/board asst. mgr.

TACOMA—Merrill D. Robison has been named asst mgr. of pulp and board manufacturing for Weyerhaeuser Co., which moves him to Tacoma headquarters. Succeeding Mr.

Robison as manager of the Grays Harbor magnesium-base sulfite mill at Cosmopolis, Wash., is John R. Callahan, Jr., who had been production manager/board at the Longview

mill. Mr. Robison will serve under Russell J. LeRoux, manager of manufacturing, pulp and paperboard division.

Mr. Robison joined Weyerhaeuser

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4. **virtually no dust or drag** . . . The 5-6 micro inch finish insures cleaner cuts with absolute accuracy over longer periods.
5. **protective packaging** . . . A new rust-preventive, chemically treated wrapping completely surrounds each JET-CUT, keeping out moisture and assuring corrosion-free storage for years.

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in 1947 as an engineer, serving in this capacity at Longview and Springfield, Ore., prior to becoming construction engineer in 1956. He was in charge of design and construction of the Grays Harbor mill. Mr. Callahan joined the firm in 1946 as junior engineer. He became asst. branch manager at Longview in 1957 and was named production mgr./board early this year.

In another move, Spencer M. Smith has been appointed manager of pulp sales for Weyerhaeuser Co., it has been announced by Vice President Howard W. Morgan.

With headquarters in New York, Mr. Smith will supervise pulp sales in the three regions of Weyerhaeuser's pulp and paperboard division. He has



Merrill D. Robison

served as sales manager of the eastern region.

Earlier, he was manager of pulp sales in the Midwestern region. His employment with Weyerhaeuser be-



Russell J. LeRoux

gan at Springfield, Ore., in 1949.

Mr. Smith is a graduate of Dartmouth College and served in the Navy during World War II. He is married and has two children. ■

Eddie Barrett, Market Pulp Veteran, Dies

NEW YORK—E. E. (Eddie) Barrett, a veteran in woodpulp and newsprint sales for more than 30 years, died Feb. 26 at the age of 68. He lived at 12 Gerada Lane, New Rochelle, N.Y., and is survived by his widow, three daughters, and two sons, William Barrett, vice president of Mead Pulp Sales, and Eddie Jr., a broker.

The senior Eddie was born in Cincinnati and started with Mead Pulp Sales in Dayton, O., in the mid-20's, moving to Montreal and then New York for Mead, where he was vice president. Later he was president of Pulp Sales Corp., New York, and vice president of G. F. Steele Co. (newsprint) and he represented several pulp

companies after the war. For a period he was vice president of Powell River Sales.

In more recent years, Mr. Barrett was president of Canadian Woodpulp Co., New York, representing Great Lakes Paper Co.

In the 1940's he was the recipient of a high Finnish decoration. ■

STRICTLY PERSONAL...

East



Wojtul



Pitts

Peter P. Wojtul, a v.p. of Continental Can and former gen. mgr. of Fibre Drum & Corrugated Box Div., has been named gen. mgr. of boxboard, folding carton and fibre drum operations of the company. Lewis B. Pitts, former Northeast area mgr. of Fibre Drum & Corrugated Box Div., is appointed gen. mgr. of newly-created Corrugated Container Div.

Charles Cashman moves up as divisional chemist for industrial papers at Crocker, Burbank & Co. Ass'n. . . . Malcolm Gray is now mgr. of trade relations, Gilman Paper Co. . . . Stanley Bell, director of supplies and marketing of

The Bowater Paper Corp. Ltd., London, has been appointed a director of the Bowater Corp. of North America Ltd. . . .

C. Rickert Lewis is now direct sales mgr., Oxford Paper Co. . . . J. Burk LeClere, president, F. J. Kress Box Co. Div., St. Regis Paper Co., has retired. . . . James H. Taylor is now asst. to the vice pres., consumer products group, Standard Packaging Corp. . . .

. . . William G. Loeffler Jr. has been named mgr. of the A. M. Collins plant of International Paper Co. . . . Ellsworth Geist, vice pres. and advertising mgr., S. D. Warren Co., has retired. . . . John F. Howe succeeds him as dir. of advtg.

IP Forms New Export Division

To coordinate exports of International Paper's paper and paperboard, Vice Pres. John F. Howden has been named president of a new Overseas Division. Vice presidents will be William D. Hurlbut, Gunnar M. Oleson, Wentworth Brown and Ernest de la Ossa.

Frederick M. Jennings moves into new post of manager of pulp sales of Riegel Paper Corp. R. L. Hoff continues as asst. mgr., pulp sales. George E. Oakley, asst. mgr. of paperboard sales, advances to mgr. of paperboard sales. William E. Butler moves up to Eastern special accounts mgr., packaging materials sales of Riegel's specialty products div. . . .

Four major promotions have been made at Oxford Paper Co. George E. ("Jim") Prentiss moves up as production mgr. at the Lawrence, Mass. mill. John C. Bloom transfers to Oxford's New York office as staff asst., mfg. Willis Hartford becomes mill mgr. at Lawrence. Chester N. Stupp steps up as mill mgr. at the West Carrollton, Ohio mill.

Albert J. Reichers has joined Rice-Barton Corp. as manager of marketing. He had been plant mgr. for Cooper Alloy.

Peter T. Spottiswoode, is now purchasing director, Sherman Paper Products, Co. . . . Norton L. Sherman moves up as technical director. . . . Charles Batchelder, asst. comptroller, becomes comptroller and Peter N. Schorer steps up as advertising mgr.—Maurice R. Castagne.

. . . continued on p. 68

Anglo Paper Products, Limited
takes pleasure in announcing
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in the United States

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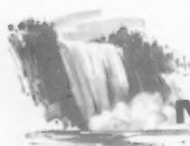
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October 5, 1960

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Sincerely yours,

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JOJ:bh



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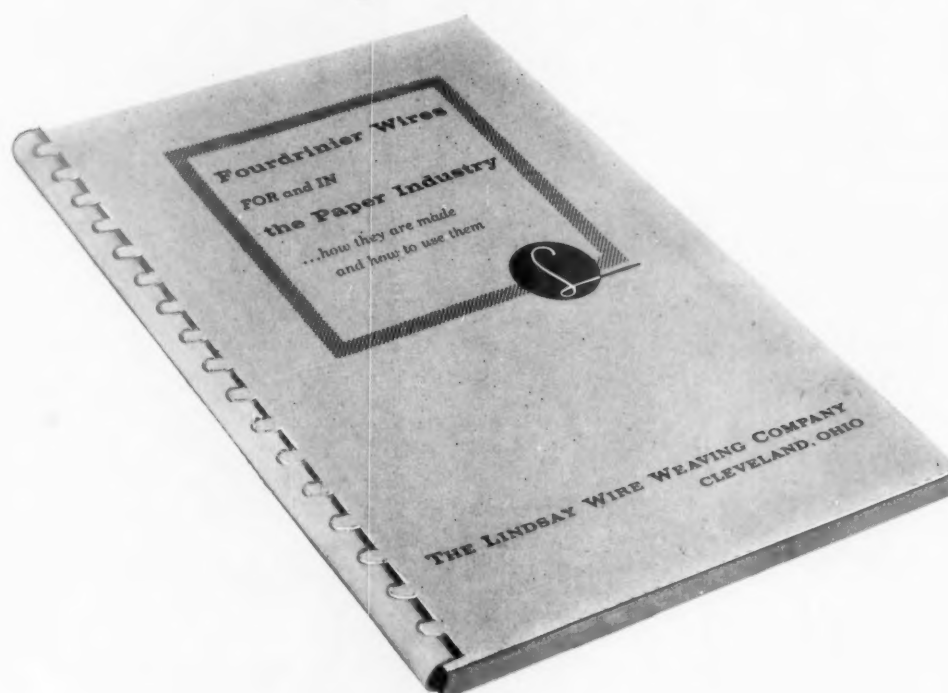
Middletown, Ohio

COMPLETE STOCK

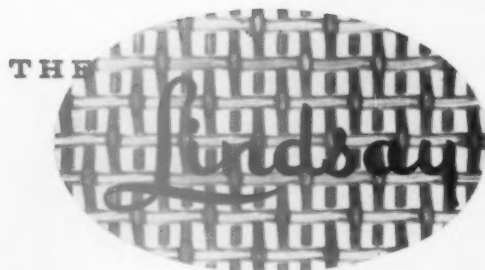
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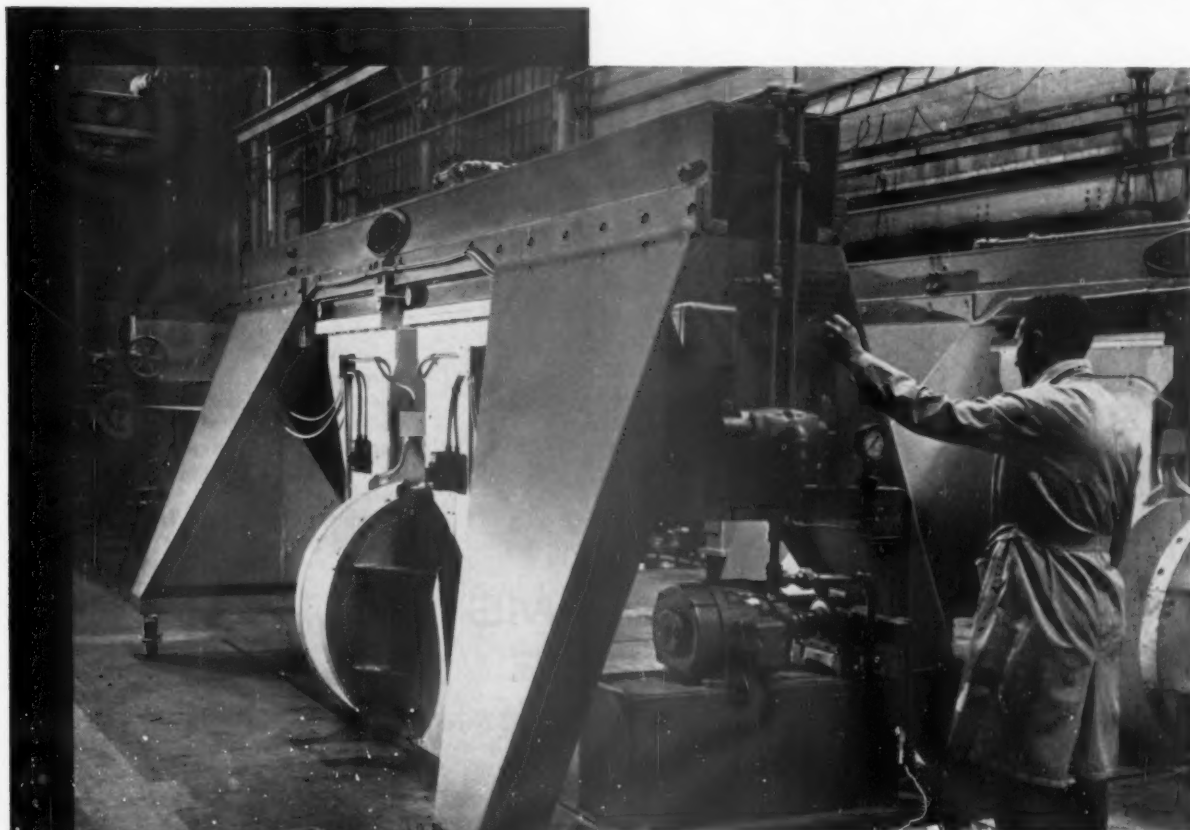
This 64-page brochure is divided into two sections. More than $\frac{3}{4}$ of the total page area is occupied by photographic illustration . . . The first section portrays the extreme care which must be exercised in the *manufacture* of Fourdrinier wire. The second points up certain difficulties which are sometimes met in the *use* of Fourdrinier wire cloth, and suggests means of dealing with those hazards . . . a copy is available for you upon request.



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Canadian Representative: Pulp and Paper Mill Association Ltd., P.O. Box 850,
Station "O", Montreal 9, Quebec



THERE ARE SOME AIR DRYING PROBLEMS SF DOES NOT HANDLE

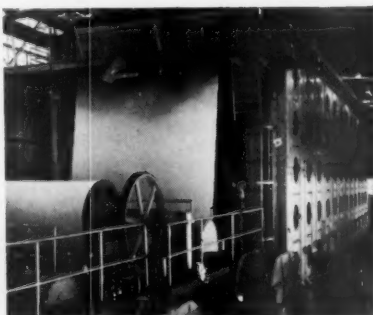
If hair-do's were an assembly-line product, SF would probably make hair dryers. Fortunately, coiffures—like pretty girls—aren't mass produced. But in virtually every industrial application, you'll find SF air-wise products being used.

Pulp Drying

Typical of SF's air-handling capacity, for instance, is the Flakt Dryer*, Type L which floats the pulp sheet on the drying air, thus eliminating the need for mechanical conveyors. The high velocity fans of the L Dryer create an air stream that impinges on the top and bottom of the sheet, both drying the sheet and carrying it along each horizontal pass on a cushion of air.

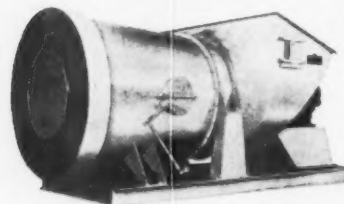
Each fan may be removed for servicing without shutting down the machine. The end roller bearings are on the outside of the machine, and

these, too, can be maintained or replaced without stopping the machine. A useful feature of the L Dryer design is that the capacity can easily be increased by extending the end unit and adding any number of fan sections. Other advantages of the principle: reduced dryer size and increased drying speed. It warrants your investigation.



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New Offices

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MEETINGS

... March

Metropolitan TAPPI, Stouffer's Restaurant, New York, N. Y.—Mar. 14

Labor-Management Safety Conference (15th Annual meeting), Sheraton Palace Hotel, San Francisco, Cal.—Mar. 15-17

Annual Short Course for superintendents and operators of water and sewerage systems, Louisiana State U., Baton Rouge, La.—March 15-17

Michigan Div. PIMA and Kalamazoo Valley Section TAPPI, Inman's Restaurant, Galesburg, Mich.—Mar. 16

1961 Graphic Arts Conference, Benjamin Franklin Hotel, Philadelphia—Mar. 17

Folding Paper Box Assn. of America (Annual meeting), Drake Hotel, Chicago—Mar. 20-22

Pacific Section TAPPI (Shibley Award meeting), Longview, Wash.—Mar. 21

Northwestern Div. PIMA, Wisconsin Rapids, Wis.—Mar. 23

National Paper Trade Assn. (annual meeting), Waldorf-Astoria Hotel, New York, N. Y.—Mar. 26-29

Miami Valley Div. PIMA, Springfield Country Club, Springfield, O.—Mar. 30

... April

Kalamazoo Valley Section, TAPPI, Inmans Restaurant—Apr. 6

Louisiana State Univ. 10th Annual Forestry Symposium, Baton Rouge, La.—Apr. 6-7

New York State Canadian Div. PIMA (spring meeting), Eastman Kodak Co., Rochester, N. Y.—Apr. 21

... May

TAPPI Coating Conference, Statler Hilton Hotel, Buffalo, N. Y.—May 8-10

Pulp & Paper Instrumentation Symposium (Sponsored jointly by TAPPI and the Instrument Society of America), Northland Hotel, Green Bay, Wis.—May 10-12

National Paperboard Assn., The Fairmont Hotel, San Francisco, Cal.—May 10-12

Institute of Paper Chemistry Executives' Conference, Institute of Paper Chemistry, Appleton, Wis.—May 25-26

... June

PIMA National Meeting, Hotel Robert Meyer, Jacksonville, Fla.—June 7-9

Sixth Industry Seminar, Institute of Paper Chemistry, Appleton, Wis.—June 11-30

Zellcheming (Germany's annual technical meeting), Baden-Baden, West Germany—June 27-30

... August

TAPPI Lignin Symposium, Edgewater Beach Hotel, Chicago—Aug. 15-18



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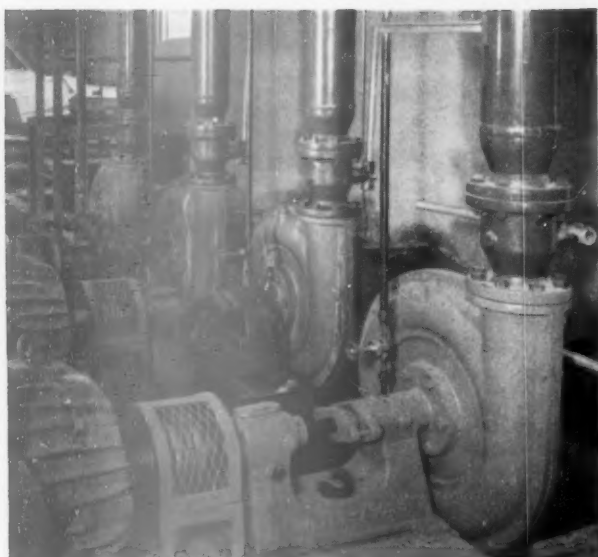
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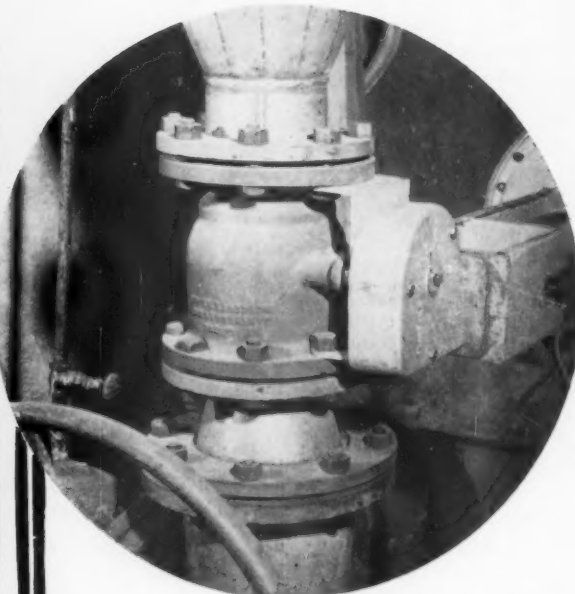


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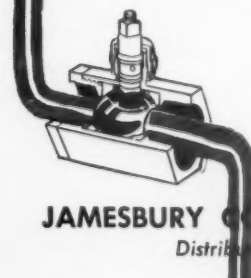
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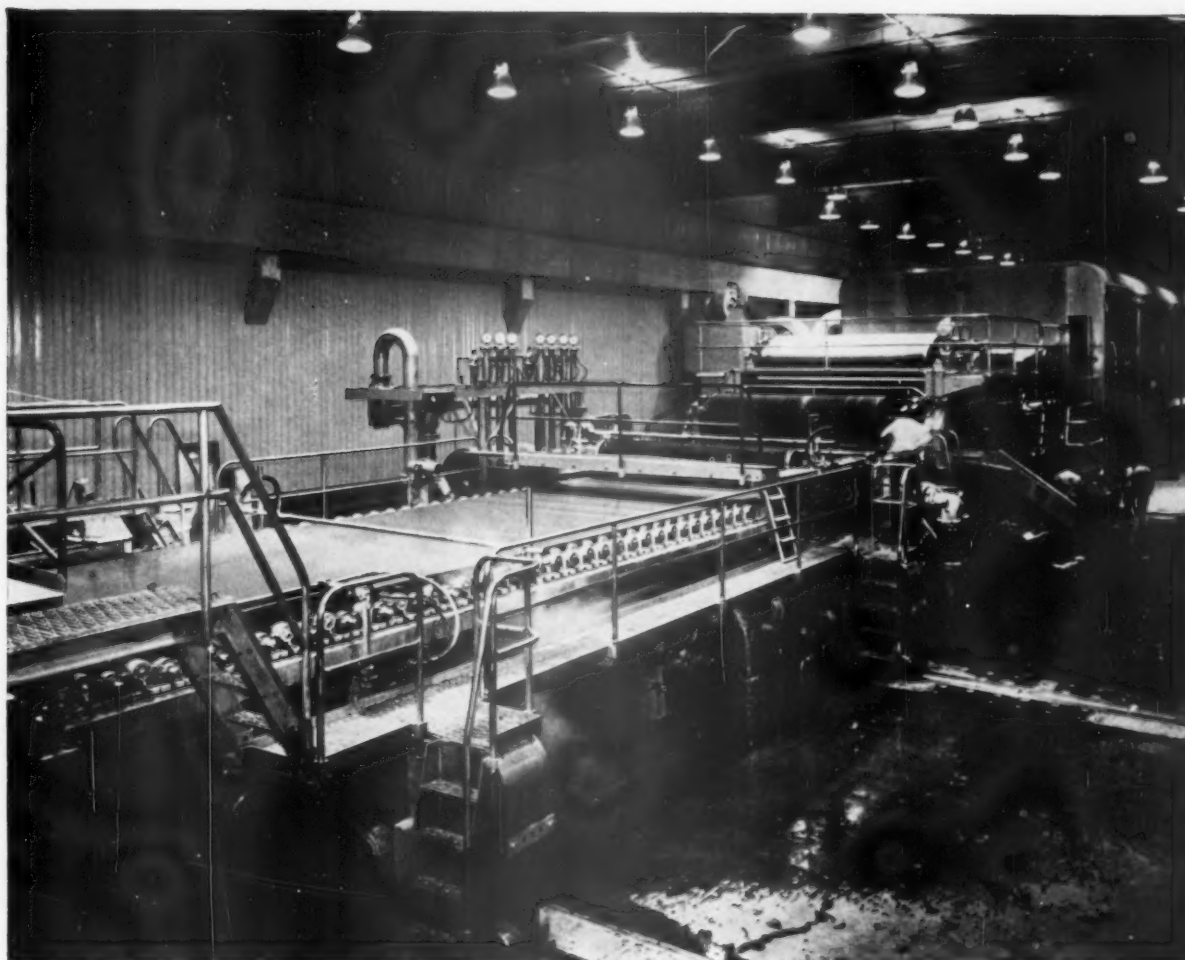
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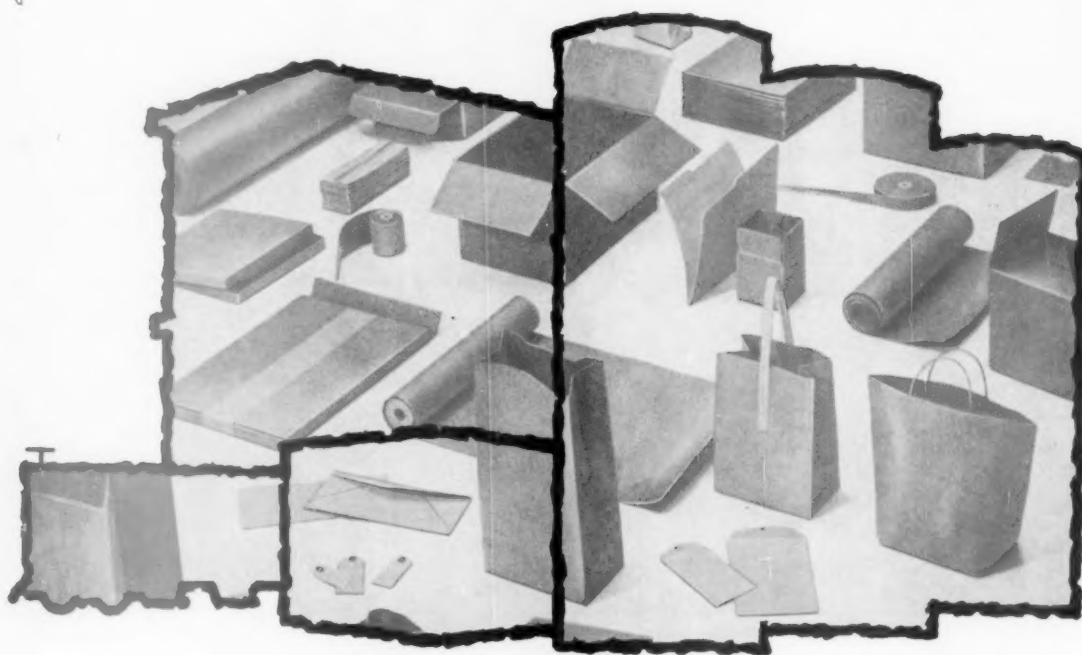
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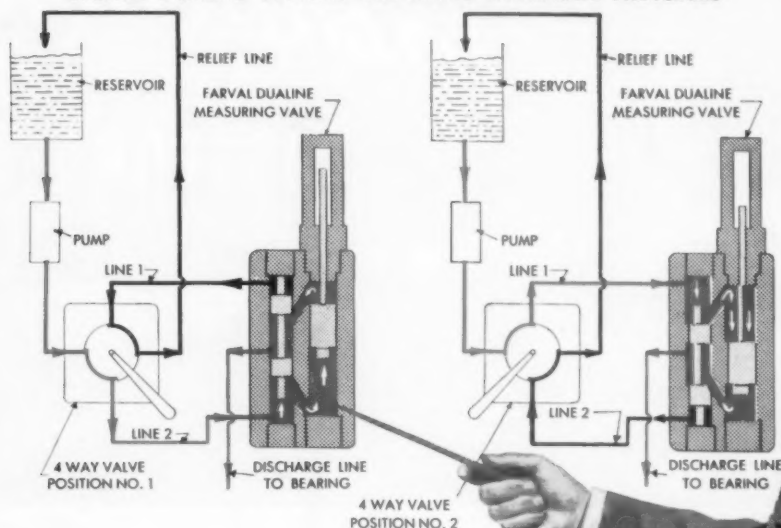


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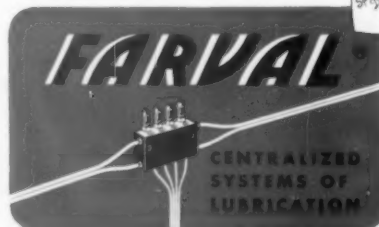
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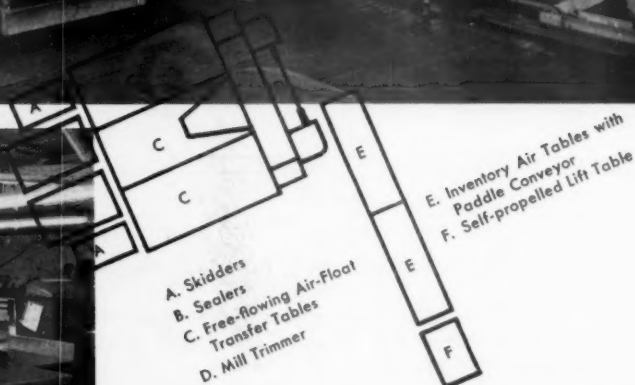
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HOW SOUTHWORTH'S AIR-LIFT* SYSTEM



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MATERIALS HANDLING ENGINEER Orman Curtis, (left, below) and H. R. Patterson, chief engineer, check out the design of equipment required for finishing and converting operations in a customer's mill. Following his mill visit, where plan was conceived, Curtis enlists full co-operation of Beloit Eastern's 60-man engineering department. Objective is to enlarge and improve mill's present converting room layout. End result of this careful operations analysis is a complete "package" including recommendations for all types of equipment needed.



CURTIS, reviewing plan for mill, shows how recommended laborsaving devices for use with Beloit Eastern equipment will help to reduce costs.



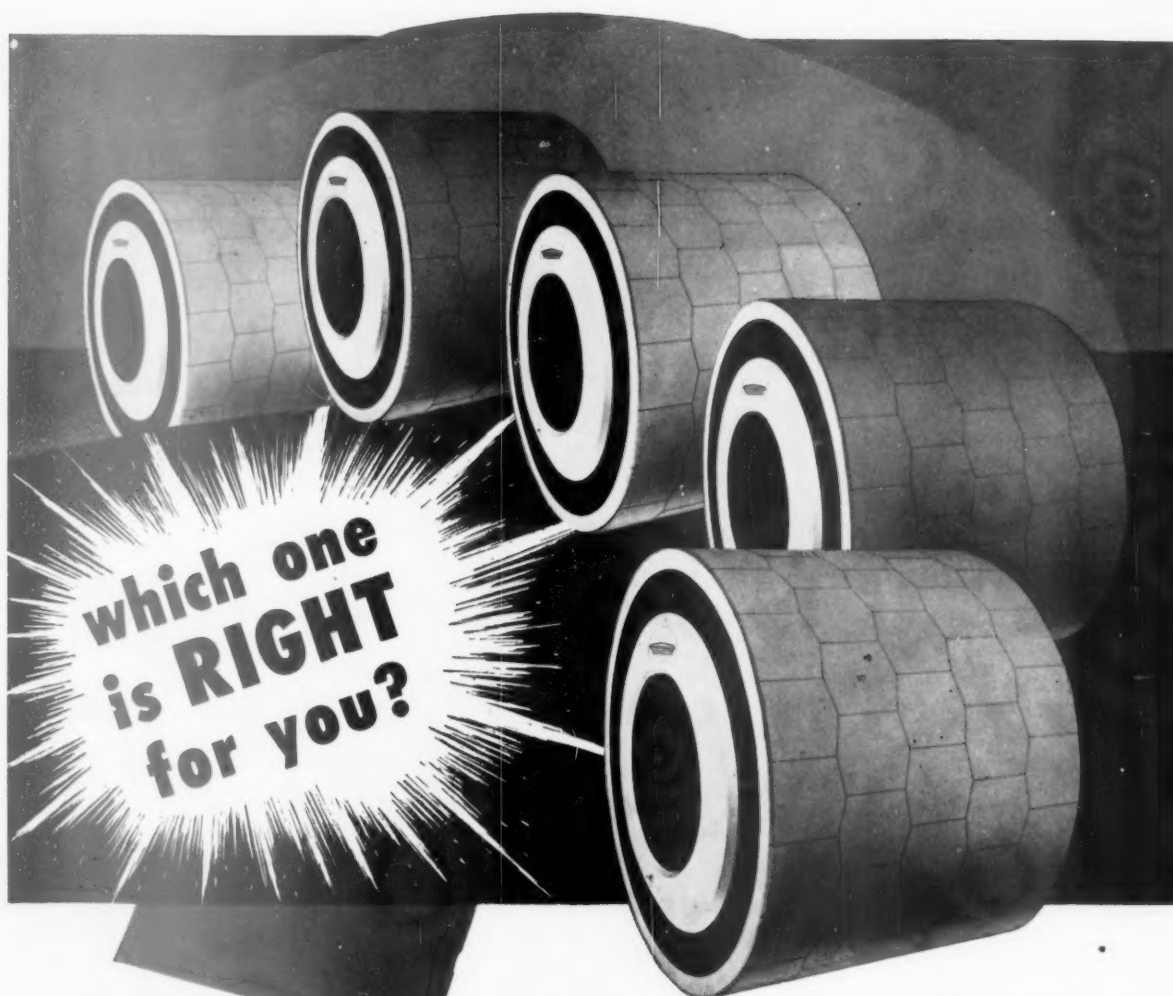
PATTERSON agrees proposed plan will effect economies. He also indicates that capacity can be increased, quality improved.

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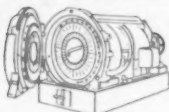
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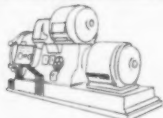
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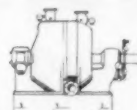
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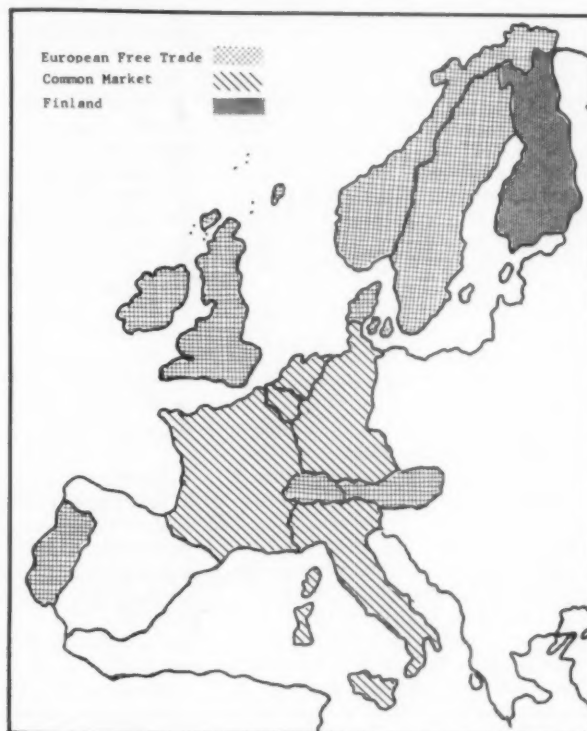


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THE INTERNATIONAL PICTURE...



A look at world trade was dominant APPA Paper Week theme. Market potential of Europe is shown here in combined economic power of Outer Seven, Inner Six, whose eventual union is assured. Included is Finland which will have benefits in EFTA, trade rights with Russia. This is how PULP & PAPER's Editor sums up the overseas picture . . .

Guide Posts for Americans Abroad

Both U. S. companies and American pulp and paper men will be more active overseas. Some helpful hints are presented

By **ALBERT W. WILSON**
Editor, *Pulp & Paper*

NEW YORK—Pulp and paper industries of the U.S.A. will increase their exports in the next year. Woodpulp exports of 1.1 million tons in 1960 were almost double 1959's figure, and should go slightly higher in 1961. Later years—1962 and 1963—loom even more brightly.

Paper and paperboard exports passed the million-ton mark—for the first time in 1960, and should continue to rise. The grade which has the brightest export future, as matters stand today, is linerboard. But all

mass-produced papers, board, newsprint and some printing grades, will find increasing outlets, despite some restrictions and protective policies for "home-grown" industries in both established and newly developing countries.

American pulp and paper industries, at the same time, will increase their investments abroad in plants—usually in partnerships with successful established companies overseas. This will be especially true in such fields as packaging products and sanitary tissues, where American experience and modern methods will be welcomed. More such partnerships are

"in the works" right now inside the Common Market borders of Europe.

Several speakers, from inside and outside the industry, discussed these subjects at several key meetings during the recent Paper Week events in New York. These subjects were "top billings" at most industry sessions.

On the basis of having spent a total of twelve months in the past two years in Europe—talking with scores of industry leaders and visiting major mills in 17 countries from Spain and North Africa to Russia, Poland and the Scandinavian nations—I may be able to offer some "helpful hints," to use the old family cookbook phrase.

... The international picture

How wisely American industry moves into its international role will have an important bearing on the success of these efforts. There is no question but that more exports will help this country to fight the business recession and create jobs and income at home. But, on the other hand, any price competition abroad will surely bring counter action and pressures in this country. An important basic question to consider first is the threat of restrictions on American spending.

Swiss bankers' views on dollar

are very strongly in favor of government policies which would lead to an expansion of trade, not a contraction. I had the opportunity, having left Zurich only shortly before Paper Week, to discuss the subject of the threat to the dollar with Swiss bankers in that very important international banking center.

This raised the serious specter of possible Russian counter action if there was any demonetization or restrictive monetary policies in the West. Their contention was that the Western World's reserve currency should not be subject to any restrictive policies but whatever monetary moves are taken should be calculated to lead to opening the doors to trade. Restore the greater utility of gold in the West, said these Swiss bankers, or the West may be confronted with Soviet Russia smartly reacting by considering establishing gold backing for the Russian ruble.

In the banks of Paradeplatz, in Zurich, the first reports of threats to the dollar were, of course, a subject of tremendous interest. I found their views were strongly in back of a free reserve currency and they spoke of the dollar as ordained by history for this role, just as throughout a previous century the British pound sterling enjoyed no restriction and played its important historic role in commercial development.

I found no Europeans in Zurich, London or elsewhere, who felt that a publicity campaign to bring tourists to America could have any important effect on protecting the dollar. Their blunt and matter-of-fact comment on this was simply that the Europeans who have the money will come to America and publicity or friendly welcomes on this side of the water would not change that situation.

How to win friends abroad

is a point of great importance in the development of international trade and international manufacturing links

for American pulp and paper companies. Here are eight "caution signs" I offer to the American going abroad on pulp and paper business:

(1) Be willing to accept other ways of doing things in other countries.

(2) Always remember it is you who are the alien—the guest.

(3) Learn a language or send men abroad who have a second language—preferably German or French for Europe. Sure, many top men in pulp and paper overseas know English, but remember it is their second language, not their first. And you may be surprised how many important people don't know English.

(4) Don't try to rush things. They just don't work that way abroad.

(5) Be willing to say "yes" to a proposal of how to proceed. In other words, don't say "I never do that" or "we in America do it this way." Accept their food, their customs, their rituals graciously.

(6) Remember, that each country is different—has different customs, ideas and ideals. Try to tailor your approach especially to whatever country you are in.

(7) Remember, also, that protocol is different. Be sure you know the right man to talk with. Often, the lines are drawn sharply between top management and supervisors. Often, it is not right to see men of different rank together. You'll learn about "procurists," which means men who have a right to sign papers for a company.

(8) Speak English slowly and distinctly. Never use American slang. That's quickest way to stymie a conversation.

A real danger area

however, is the question of actual business conduct. This is something for Americans to really be careful about—the going can become exceedingly rough if they don't. This refers to the whole gamut of sales approach—prices, pacts and all.

At Paper Week, William R. M. Watson, the owner of a little Scottish mill, made a remark which was *not* in his address at the final banquet—it hardly fit into that evening of congratulatory bouquets for American papermakers, because it was pretty blunt but sound advice to American exporters. He said Americans should remember if they sell more paper in Europe, perhaps they will sell less pulp. Mr. Watson, who served as president of the British Paper & Board Makers Association with the support of British companies many times bigger than his own, simply meant that

less pulp would be needed to fill out paper requirements.

I might go a step further than Mr. Watson and suggest there could be a question of retaliation also. And this applies to Scandinavians as well as the North American producers. It could be that people to whom they are selling woodpulp might just look for pulp somewhere else if they feel American or Scandinavian paper is taking paper customers away from them.

There is going to be keen and, no doubt, healthy competition between Scandinavian countries and North America throughout the world in the years to come, as these are the two major sources for the raw material for paper. And now they are competing sharply in the linerboard field. If it ever ceased to be a healthy competition—if it developed into an unhealthy approach to pricing—the reactions could be serious over here in the United States. They may not apply only to pulp, either, but also to newsprint and paper board.

Cellulose, newsprint, linerboard

have become world commodities. They will seek their own levels. It could be dangerous to press too strongly. As world commodities, the market for these commodities cannot be depressed in one area of the world without eventually affecting other market areas.

A certain individual at Paper Week—not an American—put it this way: "Don't foul someone else's nest, if you want to keep yours clean."

Every European country, and the newly developing countries in other parts of the world, want to have their own pulp and paper industries. But there will still be markets for North America, Scandinavia and, some years hence, probably Russia, too, as the standards and literacy levels rise.

In Europe, the Common Market nations—France, West Germany, Italy, Holland, Belgium, and Luxembourg—will have strong paper industries. They will make quality grades and specialty grades and they will want, as they are now doing, to ship certain special papers into the United States. Incidentally, they make some excellent papers, too. France, Italy and Germany will make more hardwood pulps. But they will still import quality cellulose, newsprint and linerboard.

Negotiations to lower tariffs

are now under way in Geneva, Switzerland, where representatives of 32 nations are convened. Since September they have been working mainly at efforts to obtain concessions in the

Common Market for United States, Canada and other countries outside the market. This is GATT—the General Agreement on Tariffs and Trade, a great multilateral tariff bargaining establishment.

But the new trade blocs in Europe—the inner Six and also the Outer Seven of EFTA (the European Free Trade Association)—must be dealt with first. These blocs have been rapidly lowering their own “inside” tariffs to the point where they will soon be unimportant. The more this trend develops, the more they may be able to grant some concessions to outside countries.

These problems must be resolved before GATT settles down to country-by-country tariff bargaining. These meetings in Geneva will continue for several months.

Everyone I talked with in Europe fully expects the Inner Six and the Outer Seven—the latter are Britain, Sweden, Norway, Denmark, Portugal, Switzerland and Austria—to eventually be joined as one huge economic and political union. It would have bargaining power, then, about equal to Russia on one side and the U.S.A. on the other. Even paper industry executives who don't want this to happen are agreed that their governments will force the issue. For national defense and for survival, in fact, the governments will not permit two opposing trade blocs in Europe to continue for long—maybe it will happen in two or three years.

Finland is going to join the Outer Seven in a special way—under certain conditions which may not make it a full member because it must continue to grant certain trade privileges

to its neighbor Russia.

More than tariffs, it is really the dollar shortages, currency restrictions and quotas for imports which stand in the way of more American paper trade in Europe. But the trend is to more liberalization and removal of all kinds of trade restrictions. Isolated countries have raised some tariffs or restrictions to protect new industries, but these are still exceptions.

The problems raised by the trade blocs and by the protectionism of individual countries, as Colombia, for example, and by lack of dollars, as in Brazil, are knotty problems. But the overall trend seems to be on the side of opening up trade in pulp and paper. Remember, the United States will be asked to make some concessions, too, even though it has done a lot. That's the bargaining spirit of GATT—reciprocity. ■

APPA Open Meeting . . .

How Experts View Exports

NEW YORK—Optimistic view for American exports was the dominant theme at the open meeting on the “Export Potentials” for the American pulp and paper industry which drew a big audience in the Waldorf—it was one of the best attended of Paper Week meetings.

Gabriel J. Ticoulat, senior vice president, Crown Zellerbach Corp., who has made recent survey trips to Europe and Japan, served as chairman

and he summed up the discussions:

(1) Long term picture for woodpulp exports is excellent, but the short term is fraught with some problems.

(2) The expansion and growth in the European and other trade blocs, while seeming to set up barriers, will open markets for U.S. mills because these markets will expand.

(3) Despite nationalistic and protection policies in some developing countries, they must learn to be con-

sumers as well as producers.

(4) Our strong conviction is that the United States pulp, paper and paperboard mills will be permitted to compete on equal terms abroad.

Pulp exports growing

tremendously, reported Lawson P. Turcotte, who is president of both Puget Sound Pulp & Timber Co. and Ketchikan Pulp Co. Canadian-born, he has been with these and predecessors



GABRIEL J. TICOULAT, senior vice pres., Crown Zellerbach Corp., presided at meeting of APPA Export Committee.



LAWSON P. TURCOTTE, president of Puget Sound Pulp & Timber and of Ketchikan Pulp, spoke on woodpulp export potentials.



DR. CARL E. NOBLE, mgr. of consumer products marketing, planning and research, Kimberly-Clark, discussed researching foreign markets.

... The international picture

sor West Coast companies for 32 years and during all those years their business was, in part, export. Puget pulp has been shipped to all corners of the world.

He predicted 1961 pulp shipments would be a little above or possibly a little below the record shipments from U.S. mills in 1960 of over one million tons. But the "rewards" for export are not so good, he added. The years ahead may bring improvement.

The volume of exports, however, said Mr. Turcotte, has been very helpful to a pulp industry in the throes of over-capacity for domestic needs.

He said it was difficult to generalize very much on exports as the potentials show up in the integrated United States companies when the markets at home weaken. He said there were dollar and political problems ahead.

Scandinavia and North America can easily supply all the world's needs for cellulose for some time, he said. Canada is bringing in an additional 600,000 tons by next January, and Scandinavia will have an additional 2,000,000 tons in the next few years, which may be revised downward 1,500,000 tons because of using it for paper or board.

Some markets will dry up as developing countries attempt pulp manufacturing ventures, whether they are sound or not, he said.

He emphasized the need for sound marketing policies by all producers because of the inter-relation of the world markets.

Serious raw material problems will face the paper industries in many countries by the late 1960s, said Mr. Ticoulat in introducing Mr. Turcotte. The Crown Z executive predicted the Export-Import Bank would act to stimulate pulp and paper trade overseas and that legislative action may be needed.

In replying to questions, Mr. Turcotte expressed the hope that International Cooperation Administration funds would be available for pulp exports to countries receiving this aid. It was stated that it is now an ICA requirement that all pulp exports be from either U.S.A. or Finnish mills.

The Common Market "progresses" in Europe, said Horace B. McCoy, president of the Trade Relations Council of the U.S., formerly in government service many years. His last government post was heading the Business and Defense Services from 1956-9.

The Common Market is averaging out its exterior tariffs and will bargain with the U.S., he said. He noted that the GATT conference in Geneva is heading for another round of tariff reductions. There has been much liberalization of imports from dollar countries, but there are still some "stiff and small quotas" for imports overseas, as in textiles, declared Mr. McCoy.

EFTA—the Outer Seven trade bloc of Europe—is reducing duties to member nations but generally not to non-members, he said.

He predicted union of the Inner Six and Outer Seven—"events will force it; otherwise Europe faces a chaotic future," he said. Mr. Ticoulat later joined in this prediction.

Mr. McCoy said undeveloped countries want money for plants; they want to sell finished products in world markets, not just raw material. They believe, he said, that marginal American industries should give up markets to them, and according to some of them, this would include textiles.

Resistance to throw-away paper products is being noted abroad, he said. But he felt there would be a "tremendous opportunity to increase per capita paper consumption"

in many nations. He gave as two reasons for expecting an increase: (1) larger incomes and (2) growth of advertising. To this, Mr. Ticoulat added a third—industrialization.

OECD (Organization for Economic Cooperation and Development, the successor to Europe's OEEC) aims in its charter to enter in worldwide combines to stabilize markets, said Mr. McCoy. The European countries will not permit imports which they consider injurious to their own industries, but even so American exports are increasing—by 20% last year, he said. Also, there are more American plants in Europe, making what formerly was exported.

The level of costs is going up in U.S.A., which will not help the export effort. He warned: "It will be too bad if we get into credit battles."

It's exciting to survey markets abroad, said Dr. Carl E. Noble, manager of consumer products marketing, planning and research for Kimberly-Clark. He has lectured in universities abroad. He started with K-C as a quality methods engineer in 1946.

His company has been introducing its trademarked products through plants and partnerships in Canada, Britain, France, Germany, Mexico, South Africa and Australia. "Every country offers surprises and unique features," he said. "What works well in the U.S. won't necessarily work well abroad."

But the techniques of market research are as valid abroad as at home, he said, adding that motivation research answers many questions.

He listed as basic principles of market research, in order: 1st, explore through secondary research sources; 2nd, look into agreements, cartels, tariffs, etc.; 3rd, study complaints—what markets are not satisfied; and 4th, determine how to satisfy these markets. ■

Per Capita Paper Consumption, 1950 – 1959

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
U.S.A.	381	381	393	392	383.7	418	432	412.4	405.6	437.8
Canada	256	260	250	250	280.3	280	280	280	280	280
Sweden	122	101	101	200	200	200	208	214	222	232
Great Britain	102	133	130	144	164	187	180	183	198	207
Finland	102	99	100	106	124	124	131	131	131.7	159
France	74	63	52	73	84	94	107	116	115	115
West Germany	60	73	79	95	109	121	128	140	145	156
Austria	55	61	61	42	69	72	72	82	82	88.66
Italy	26	26.45	22	32	35	35	43	50.7	50.7	50.6

Data compiled by PULP & PAPER

HOW TO DO IT

Problem: Changing tractor accessories quickly



Problem: Replacing and securing tips on tree rippers with a minimum of time and trouble.

Solution: Caterpillar Tractor has a new, simple hand tool to make this job easier. The two-piece quick-change pinning device can be installed or removed within one minute. Each pin, semi-circular in design, is bent slightly in the center to achieve a locking effect and is flanged at one end. Pins install back-to-back and are easily installed or removed because of the inherent wedging action. The new pins are virtually unbreakable since they are made of through-hardened alloy steel forgings. They will fit all Caterpillar ripper stocks now in the field.

Problem: Preventing erosion in mill pump castings

Problem: Downtime and maintenance cost increases caused by corrosion, erosion in pump castings.

Place: Crown Zellerbach mill at Ocean Falls, B.C.

Solution: A steel plate welded to the inside face of the caustic pump casing in the kraft mill. A welding lead hand, Carl Peterson, thought up the idea which has eliminated most of the difficulty.

When the idea was put in practice it resulted in sharp reduction in erosion and helped to preserve the original casting for an indefinite period of time.

A "How to do it" for management: Peterson's idea earned him \$605 from company, should spur others to improvise ideas.



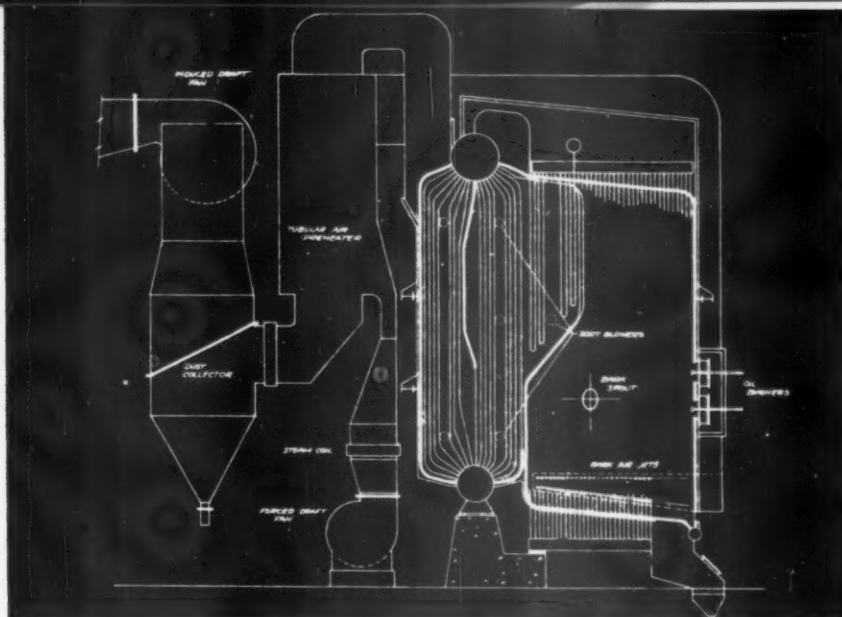
Problem: Accident prevention at blind mill corners

Problem: The prevention of accidents—particularly where vehicles are concerned—in tight, blind corners of the mill.

Place: Brunswick Pulp & Paper Co., Brunswick, Ga.

Solution: Brunswick safety engineers have erected mirrors mounted on sturdy, but movable, wooden frames. These are set up at intersections to permit operators of fork lift trucks and other mill vehicles to "look before they leap." The mirrors have proved particularly effective since in many vehicles the driver sits well behind the front of the truck, cannot see whether anything is coming until his vehicle has already entered so far into the intersection that an accident is imminent.





Is Adaption of Swedish Ideas

winter heating load, get self-sustaining summer operation

Original boilers were adequate to serve the mill's steam requirements, except for age. Each was capable of 15,000 lbs./hr. steam generation. All had been fired by old V-type coal stokers.

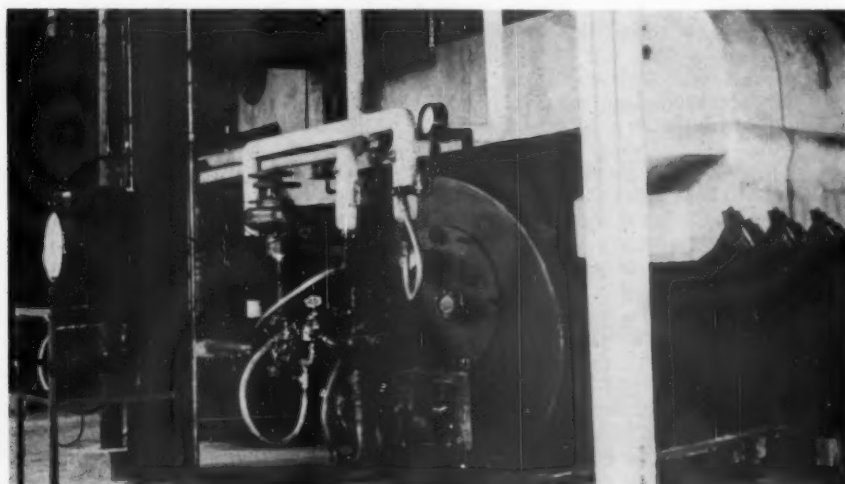
Initially, one unit was equipped to burn SSL with a cylindrical muffle type burner mounted vertically due to space limitations. After several modifications, this boiler was a success. It would produce 15,000 lbs./hr. steam with peak capacity up to 20,000 lbs./hr., equal to boiler capacity when burning coal.

This unit became known as the

Jolley burner in honor of R. S. Jolley, who had done much of the early work in burning experimentation for Consolidated. He had experienced difficulty in maintaining ignition during his original project and had tried two remedies. First was to lengthen the cylindrical furnace. This helped but space was a limiting factor. Next, air preheat was tried with excellent success. At first, air tempering with steam coils was used. Since there were high exit gas temperatures from the older boiler, it was decided that an air heater would accomplish the task and at the same time improve boiler

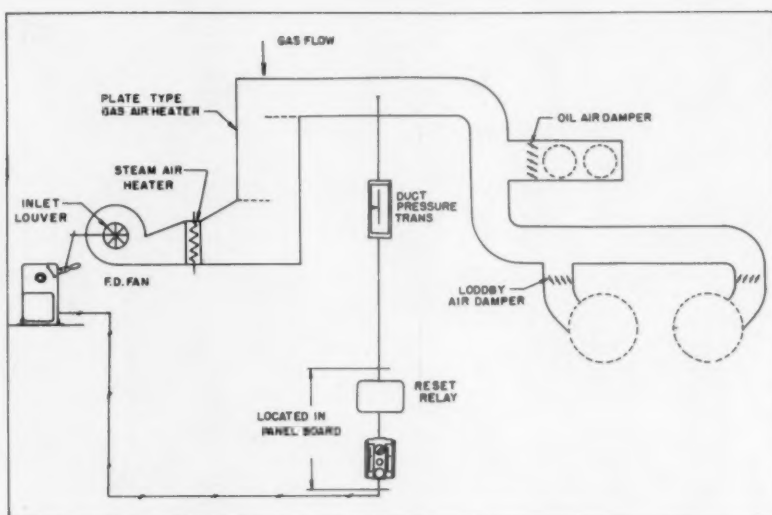
efficiency. The problem was to design an air heater that would not plug with the considerable quantities of powder-like fly ash (10% approximately on dry basis of fuel) that build up and stick to tubular heating surfaces, baffles, and other protruding surfaces.

A flat plate heater was designed under Mr. Jolley's direction and built without corrugations and a minimum of other projections on which fly ash could build. The heater was a success, but due to space limitations it was of two-pass construction. The downward vertical pass kept clean, but the re-



TWO LODDBY BURNERS are mounted on spent sulfite liquor boiler front in V-pattern. This is designed after best Swedish systems and avoids flame travel along furnace side walls as much as practical. When only one Loddby furnace operates, gas travel tends to center of boiler.

ONE FORCED DRAFT FAN SUPPLIES combustion air to both oil burners and waste fuel burners; the Loddby furnace in the case of the liquor burner and the bark air nozzles for the bark burner. Forced draft fan discharge pressure control regulates air pressure in plenum supplying the oil burner windbox and the Loddby air manifolds or bark nozzles. System does not have to run for proper damper position for each loading as dampers can be precalibrated and parallel positioning control function can respond immediately to load changes.



versing bend and the upward-sweeping gas pass tended to build up. The basic idea was good, but needed some modifications.

The first old burner would burn only about half the fuel produced by the liquor evaporating plant, so it became necessary to equip a second unit.

Using Swedish designs, the second unit was constructed with a genuine Loddby burner that was shorter and fatter than the original. Both worked with equal efficiency and about the only difference was that the smaller bore unit permitted a little better turn-down for lower ratings.

By this time SSL was being burned successfully, if success could be accepted as getting rid of the liquor as fuel and producing steam at a good rating on old boilers. But this was by no means an economic success, as oil could be burned instead of SSL and produced steam at lower cost.

Reason for economic success

of burning SSL in Sweden is that fuel costs are double those at Appleton. Scandinavian mills maintain high burning efficiency and Consolidated has tried to copy this, in the main with success. But we commonly use 5% of steam generated as atomizing steam for the SSL burners, which is much greater than the Swedish plants need for this purpose.

Fly ash is also a problem in Sweden; first in collecting it and secondly in disposing of it. An efficient collector in operation in Sweden was studied during our visit. It was made by Svenska Fläktfabriken (in the U.S., American SF Corp.). The firm however, does not make fans or dust collectors in North America. Therefore the dust collector at Appleton was fur-

nished by Green Fuel Economizer Corp., using Svenska designs and patents.

Key feature is the coil spring, shaped like a bed spring, in each small tubular cyclone unit. These springs are flexed periodically by an air cylinder to scrape off or break up the fly ash accumulation before it builds up to serious proportions. This collector is a tremendous improvement over the previous one but it is not yet operating without some difficulties.

Oil was selected as the standby fuel, for compatibility of fuel systems. Since natural gas was to be made available in the area, we planned to use oil or gas.

Steam could be generated

when burning calcium base SSL alone, without auxiliary fuel; so we knew that the necessary boiler rating and design features needed, for SSL burning boiler could be calculated. It is interesting to note that for summer conditions steam that can be produced by SSL and bark will almost exactly match process steam requirements. Thus, both the SSL unit and the bark burner must be self-supporting and self-sustaining, not using auxiliary fuel except for start-up.

To burn the calculated maximum of liquor solids that might be expected in the future and since the boiler has a specially designed heating surface area, tube passes and combustion space, an odd rating of 52,500 lbs./steam/hr. was selected. Also, the maximum winter heating process loads add up to 105,000 lbs./hr. Thus maximum capacity was divided in half, and the bark burning unit has the same maximum capacity, although the two boilers differ in size, arrangement

and in other details.

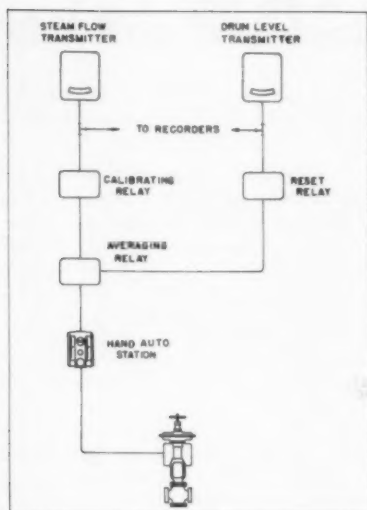
The boilers are designed for 450 psig and 750°FTT and are operated under these conditions, although process steam requirements are 120 psig and 45 psig. Reduced pressure and desuperheated steam now supply these process requirements, but a turbine is contemplated for the future.

The heat recovery apparatus is the special plate type air heater, designed to have a single vertical pass downward on the gas side with the air arranged three passes cross flow. This keeps remarkably clean. We believe that possibly air and gas pulsations from the forced draft air pressure on one side of the plate and suction of the induced draft fan on the other side tend to set up a minor vibration that keeps the surface reasonably clean. Of course, soot blowers are also used. The cold end temperature is controlled by steam coils on the incoming air side.

The two oil or gas burners are located one above the other in this comparatively narrow furnace arrangement. The air heater is the conventional tubular type. The dust collector that was so inadequate on the liquor-burning boilers has been salvaged and moved to this new boiler where it is completely satisfactory.

Again, it should be recalled that with these boilers operating with full burning of two waste fuels, steam output is equal to steam demand in the summer season. Use of exhausting steam hasn't yet been necessary to come into balance, but the possibility definitely exists. As a consequence, combustion controls must be capable of great flexibility to switch from one fuel to another and to make different fuels the primary fuel to control steam

... U. S. Boiler Uses Swedish Ideas



pressure. This control system was planned and designed by James W. Taylor, leader of the steam and combustion group in the Central Engineering Dept.

Since standby fuel is No. 6 oil

for these boilers, the combustion control was designed to operate the units as efficiently as possible on this high grade purchased fuel. The most efficient combustion control is by fuel flow-air flow ratio in which both fuel and air for combustion are measured separately and maintained in close ratio by a fully-metered control system. This basic combustion control concept is applied to both units, but it has been necessary to deviate from this method for waste fuels. For SSL, we have been unable to develop an accurate, continuous metering system. For bark there is no fuel measuring system at all.

For the SSL burning boiler, the liquor valve is controlled from the steam pressure master, enabling the boiler to maintain constant steam pressure with varying load conditions when firing SSL only. Air flow is controlled in parallel with the liquor without metering readjustment; so for the present this results in a straight parallel positioning type control on the SSL burning system.

For the bark burning boiler

primary steam pressure control is so connected that the master steam pressure controller can position the control point of the bark air flow controller, so that the amount of air distributed to the bark air nozzles may be governed by the steam pressure for any given load on the boiler. The bark air flow controller is a fully-metered control system, and can also be operated

as a set point flow controller when bark is not the primary fuel, which is the usual case. Then we would burn bark at a desired rate by positioning the air flow control set point, and steam pressure would be maintained through the master steam pressure controller regulating oil and air flow.

Versatile fuel combination

is a feature of this combustion control arrangement which permits operation of either boiler with either fuel or any combination of fuels at any time. When there is sufficient waste fuel to meet plant load demands, we can control the rate of burning of waste fuels to regulate steam pressure without burning additional No. 6 oil.

Swell characteristics of these radiant boilers are greatly reduced by internal feedwater shower pipes that preheat the feedwater in the steam space above the water level. This, together with two-element feedwater controls, successfully maintains water levels to within 1 or 2 in. with the great load changes.

A combination smoke density

and excess air recorder, incorporated in the recording instruments on the boiler control panel, supplements the combustion control system. An excess air recorder monitors the flue gas from the SSL burning boiler and enables the operator to make close control adjustment of excess air for the SSL burning operation. The smoke density recorder is connected to the outlet breeching of the bark boiler and indicates to the operator when insufficient air is being provided to the bark furnace or when adjustment of the bark air distribution distributing dampers is required. This is primarily for public relations, since this plant is located near residential areas, but it has proven an aid for efficient operation.

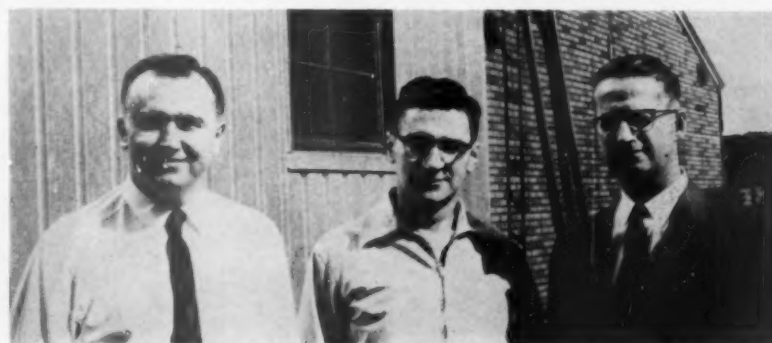
The combustion control system will be modified, when natural gas is available, to use gas flow-air flow ratio control similar to the system now in service. The switch from oil to gas will be a simple matter of opening and closing the appropriate valves and moving a transfer switch on the boiler control panel. This will permit selection of three possible fuels on each boiler and will effectively use waste fuels when available.

Design and construction

of this new boiler plant was by the Central Engineering Dept. and Consolidated's own construction crews, with consulting aid as described previously. Building steel was furnished and erected by Wisconsin Bridge & Iron Co.; boiler erection was by Babcock & Wilcox's construction div.; and piping was by Azco of Appleton.

The building itself is enclosed by insulated aluminum panels with an attractive baked-on red enamel trim flashing. The glass-steel stack is by A. O. Smith. ■

IMPORTANT TO APPLETON OPERATION are (l to r) Jaro Holy, By-Product sales rep.; William Durdell, chemical dept. foreman; Harold J. Lausman, div. mgr.



HOW TO DO IT

Problem: Keeping chips "fluid" in silos



Problem: Prevention of chip silo clogging due to chips packing in the neck of the silo.

Place: Ketchikan Pulp Co., Ketchikan, Alaska.

Solution: Ketchikan Pulp has achieved a remarkable saving of 75 to 80% in labor once used to dislodge chip hangups in the silo. It installed two Navco (National Air Vibrator Co.) industrial air vibrators on opposite sides of the steel-cone silo bottoms. This initial installation improved chip flow materially although some continued bridging of chips was experienced higher up in the storage bins.

A third vibrator was added, this one higher up on the cone and bridging was virtually eliminated. The three vibrators are operated off the mill air line and are turned on while chips are being charged into any one of seven digesters. This keeps the flow of chips steady during the crucial digester feeding period. In addition to saving labor costs it has reduced charging time to a minimum. Don Waldrop, assistant storekeeper at Ketchikan, points out strategic location of the three vibrators. Air lines leading to them are also fully visible.

Problem: Reducing silt in mill cooling water

Problem: Reducing or getting rid of a troublesome and costly mill problem, silt in cooling water.

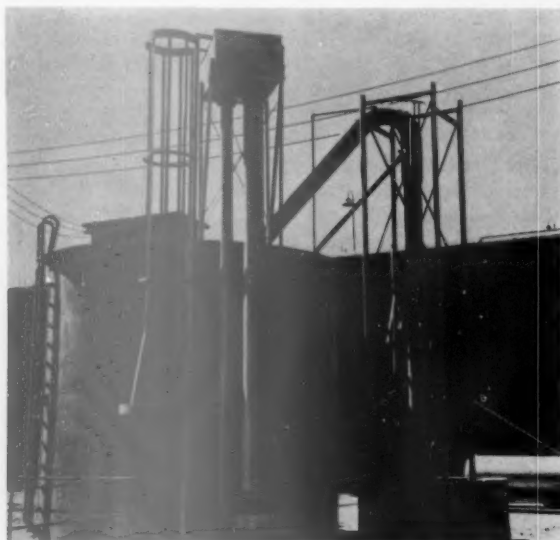
Place: Phillips Cactus Plant, Etter, Texas.

Solution: Phillips Chemical Co. has put into use equipment which is new to the cooling water field although widely accepted in general water treatment areas. It is the automatic valveless gravity filter developed by the Permutit Co. The installation reduced silt burden in the water cooling system to a negligible point, improved operation and eased maintenance of the system. This was done, says Phillips, without any requirement for electrical, mechanical or human supervision. Because of its design, the filter adapts itself automatically to variations in silt content without aid of instrumentation, extra equipment.

As a result of dirt in their system, Phillips encountered

fouling and corrosion, poor heat transfer, high maintenance costs. By using the filter, about 1% of the total flow of water circulating through the tower is bypassed. Constant filtering of this percentage reduces the silt burden to an acceptable point. In the first week of operation, suspended matter concentration in circulating water dropped from 2.0 ppm to 0.5 ppm, and has since dropped to a point considered negligible.

Filter does not contribute in any way to operating costs. No extra labor is involved in operation or maintenance and no pumps are needed because the filter works on the existing pressure head of the cooling system. Also the filter system at Phillips operates without the need for addition of any coagulants to precipitate suspended matter. Cost of this unit, says Phillips, is lower than some manual units.



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"TIME IS MONEY", a trite saying but it's still a fact! A rig that can pick up a load of pulpwood a little faster, get it on the pile or on the belt a little quicker, move in and out of the storage area with less delay, is going to go farther toward making money. Northwest Cranes in the pulpwood yard bring you advantages that smooth out the loading jobs and bring you that highly desirable feature of always being ready to go. You sit in the cab with a load to swing. Complete visibility is yours from the car to the men on the pile. You have the true "feel" of the load as the grapple settles into place. Through the Feather-Touch Clutch Control you have precise, instant response to controls. The action of the Clutch is in direct ratio to the movement of the lever which is unaffected by temperature or weather.

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NORTHWEST ENGINEERING COMPANY

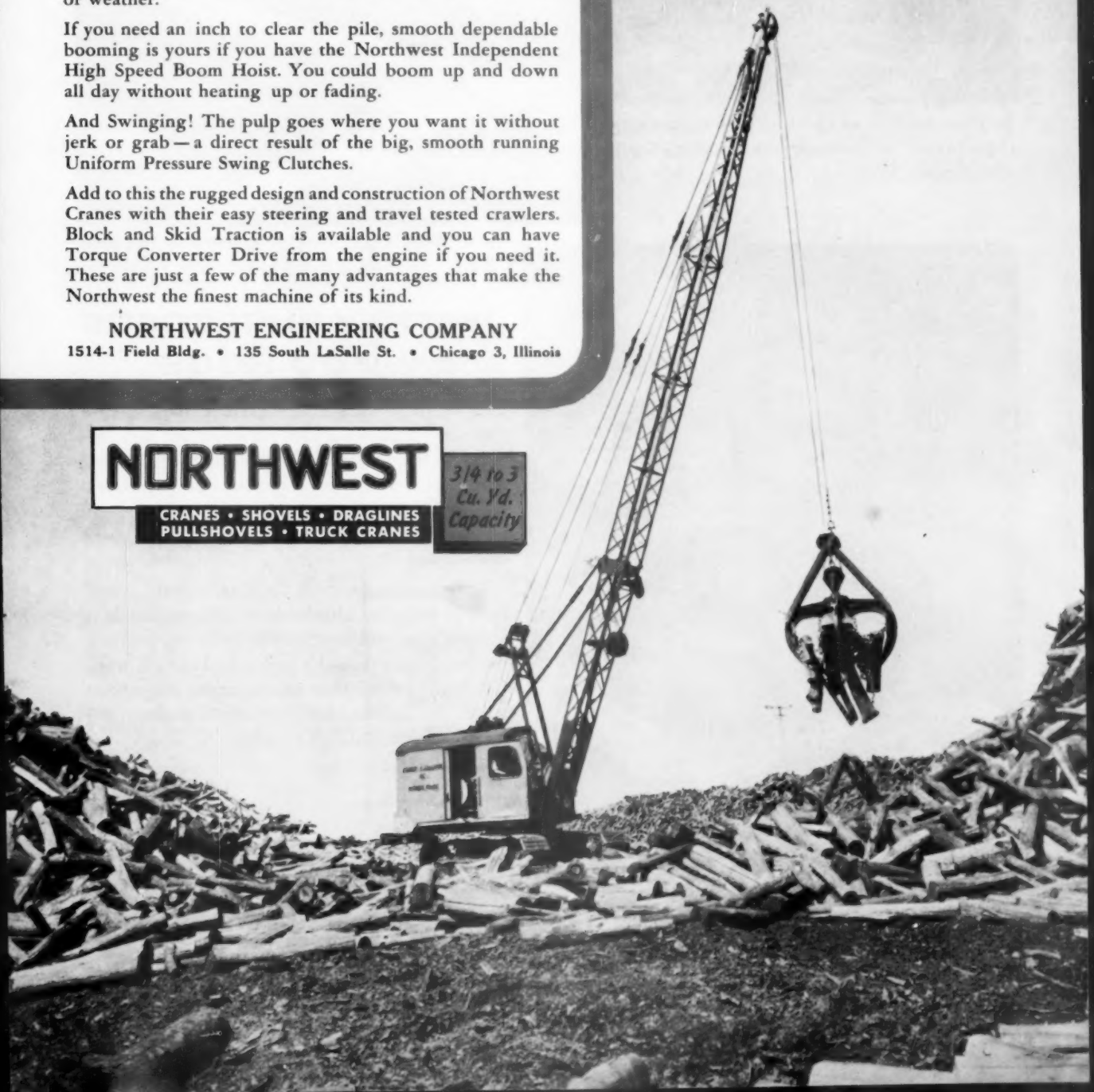
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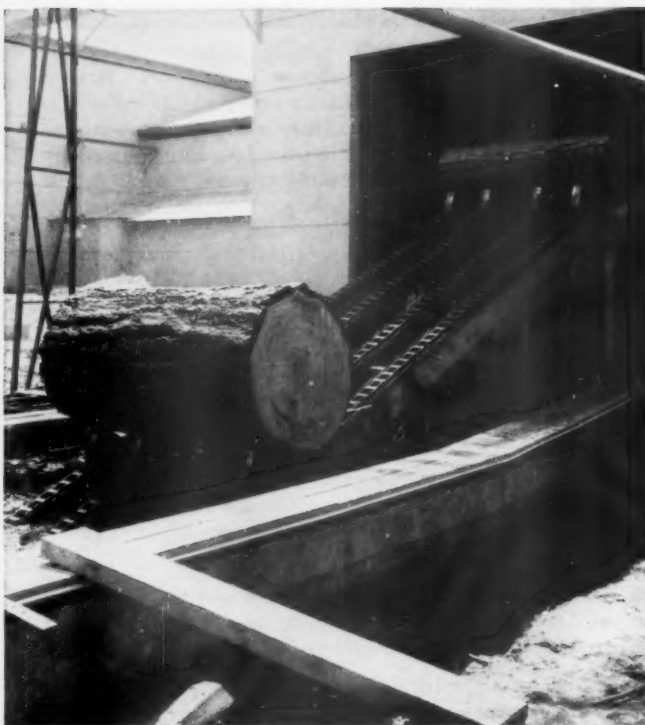


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Special Report:
SPCA Meeting

By Stanley M. Jepsen
Staff Editor



"We Must Carry Our Story To More People": Swenning

Stress on advertising, education, public relations, fire control

New Orleans
"PEOPLE WHO KNOW US, like us! But we must carry our story to more and more people . . ."

This was the keynote of the Southern Pulpwood Conservation Assn's annual meeting held here early this month. It came from outgoing president Karl Swenning, Scott Paper Co., who added that although the public's image of the pulp and paper industry is generally favorable, it is weak.

To the more than 500 representatives of the industry from 12 Southern states who attended the meeting, Mr. Swenning called for expanded communications to help increase the public's knowledge of the industry's economic role in the South.

The SPCA, which is financed and actively supported by member companies using 80% of the total southern pulpwood production, seeks to advance the development of the forest resources of the South, explained Henry J. Malsberger, Atlanta, general manager of the association.

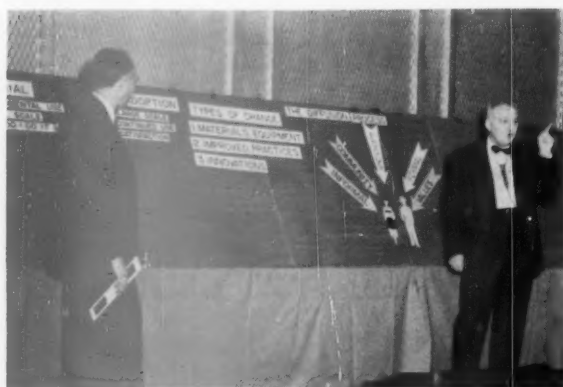
Mr. Malsberger reviewed the information, education, and demonstration programs of the organization and focused attention on the fact that the emphasis of SPCA's programs and accompanying aids, such as literature and movies, has kept pace with or has been in advance of changing conditions. He pointed out that now, in addition to having strong industry leadership and support, there is available competent public relations personnel among members and a consulting public relations agency all being guided by the results of a scientific appraisal of the public's knowledge and attitudes of the industry.

A team of research sociologists from Iowa State University discussed the process by which individuals accept new ideas. Dr. George M. Beal and Dr. Joe M. Bohlen reported on studies that indicated a five-step process in the acceptance of a new idea: Awareness, Information, Evaluation, Trial, and Adoption.

Dr. Bohlen said that the mass media were important sources of information in the first two steps. But when a person comes to the evaluation stage, when he is deciding whether or not to accept the new idea, "people seem to want two-way communication," he said. They then rely more on neighbors and friends than any other source, he believes.



RETIRING PRESIDENT of SPCA is Karl Swenning of Scott Paper Co.



DUAL PERSONALITIES DESCRIBE how ideas spread and are adopted by others. Dr. George M. Beal (left) and Dr. Joe M. Bohlen, of Iowa State, talk about "discussion process."



DISCUSSING PROGRAM International Paper's J. M. McCaffrey (l) new president talks with speaker Dr. Kenneth P. Davis (c) of the Univ. of Michigan, and W. J. Bridges, Jr. (r), new v.p.

When making a decision to adopt an idea, the researchers continued, individuals apparently rely on sources they consider to be objective. They seem to suspect mass media, salesmen, and dealers of pushing an idea mainly for the purpose of selling a product, they said.

Asked in an interview how the study applied to the association's work, Dr. Beal said that the organization hopes to interest timber producers in ideas to improve the production of timber resources in the southeast.

The two pioneers in communicating research findings contend that education projects cannot be a one-shot program. There are too many factors involved: group attitudes and orientation, values, rationality, etc. And the economics factor is always one of the foremost. The question, "When do I get my money back?" is especially important in the field of forestry and forest products, primarily because of long term operational requirements.

A Public Relations Primer

for Pulpwooders was discussed by N. P. Secrest, president of the Ga.-Fla. Pulpwood Dealers Coop. He covered his practical experiences with methods of reaching people. His program included the following areas for successful communications: Chambers of Commerce, tours of mills and woods, clubs and organizations, (Boy Scouts, Y.M.C.A., etc.) county agents, conservationists, foresters, advertising.

Mr. Secrest's conclusion: "You must have good public relations at the grass roots level."

The challenge of change

was dramatically illustrated by J. Lewis Powell, noted engineer-author on the staff of the Secretary of Defense. Powell effectively and graphi-

cally collapsed time, taking Man from the Oat Barrier to the Sound Barrier and then to the space age. In charting technology in terms of speed, Mr. Powell said, "There are too many 35 mph minds left over."

"Bad as it is," Mr. Powell said, "the world has never been in better shape than it is today. The trouble is, too many people are looking at yesterday's blueprint."

"Progress doesn't have to be an ac-

cident," he said, "you can do it intentionally."

Although man is better informed than ever before, he is also more confused, said the luncheon speaker, Dr. Kenneth McFarland, educational consultant and lecturer, General Motors, Topeka, Kan. Meetings such as the SPCA are important, he emphasized, because they provide an opportunity to channel facts into a way of life—a

These are SPCA leaders for 1961



Officers and directors for 1961 include (l to r, front row): A. L. Wenrich, Continental Can Co., Inc., Hopewell, Va.; L. A. Whittle, Brunswick Pulp & Paper Co., Brunswick, Ga.; Vice-President, W. J. Bridges, Jr., Union Bag-Camp Paper Corp., Savannah, Ga.; President, J. E. McCaffrey, International Paper Co., Mobile, Ala.; K. A. Swenning, Scott Paper Co., Chester, Pa.; B. E. Allen, Union Bag-Camp Paper Corp., Savannah, Ga.; C. Y. Townley, Champion Paper Co., Huntsville, Texas. (Back row): R.

Vance Miles, Jr., Gulf States Paper Corp., Tuscaloosa, Ala.; S. A. Boutwell, Continental Can Co., Inc., Hodge, La.; R. S. Andrews, International Paper Co., Mobile, Ala.; F. C. Gragg, International Paper Co., Camden, Ark.; C. E. Hartford, Riegel Paper Co., Acme, N. C.; George Muller, The Mead Corp., Kingsport, Tenn.; Eugene Keller, Marathon Southern Div., Butler, Ala.; Clarke Mathewson, St. Marys Kraft Corp., St. Marys, Ga.; SPCA general manager, H. J. Malsberger.

philosophy. An advocate of individual achievement, Mr. McFarland said, "If our American system should fail, we

think history will record that the failure was not due to the invention of the H-bomb, but the development of

a philosophy that the individual is no longer responsible economically or morally for his own welfare." ■

Controlled "burn-outs" one answer to fires

A national authority on "burn outs" and the author of several articles and a textbook on this subject, Dr. Kenneth P. Davis, University of Michigan, called for a "hazard reduction" program in the South. He said timberland owners in the South can remove the threat of catastrophic forest fires with an organized program to burn out the brush and undergrowth that feed major fires. Elimination of the "rough" which serves as fuel for fires, can be done without damage to valuable timber, Mr. Davis said. Another important factor: the southern forests are largely uninsured.

Weather—We cannot do much about it, but we can better understand it, and be fire weather conscious. **Land Ownership**—Great changes are taking place in patterns of ownership. Land is gravitating into larger ownerships. Problems involved are increased by multiple use, rising tide of population, mounting pressures, and rising real estate values. **Fuel**—This is the power and energy source—no fuel—no fire. Fuel reduction is the most decisive action the land owner can take. Mr. Davis says it is largely a question of economics. While it is attainable, only enough should be done to "pull the stinger"



ONE OF MAJOR MENACES FACING PULPWOOD PRODUCERS everywhere is forest fire which can be reduced drastically by controlled "burn-outs."

on really damaging fires. **Ignition Sources**—In the South, 98% of the fires are man-caused. These are theoretically preventable, for they fall into these three categories, in order of importance: Incendiaries, debris burning, and smokers.

Three factors in favor of fire prevention, says Mr. Davis: The great

power of economics. It is working in favor of fire prevention since few people will burn up their livelihood; second, the change in pattern in rural populations—the kinds of people interested in forestry and fire prevention; third, the consistent application of the good neighbor policy by large owners and corporations. ■

Big Air Tankers to Fight Forest Fires

Six British Columbia companies with extensive timber holdings are pioneering a new technique to battle forest fires—with giant flying boats capable of carrying as much as 7,000 gallons of water in a single load.

The companies concerned are B.C. Forest Products, Canadian Forest Products, Powell River Co., MacMillan & Bloedel, Tahsis Co. and Western Forest Industries. The first four companies now operate pulp and paper mills. Western Forest Industries is associated with Alaska Pine & Cellulose, which manufactures pulp, and Tahsis Co. has been planning to build a pulp mill on the west coast of Vancouver Island.

New Company Formed

A new company known as Forest Industries Flying Tankers, Ltd., has been organized by this group. Four Martin Mars flying boats, originally

built for the U. S. Navy and among the largest of their type in the world, have been acquired and will be converted for the new service at Patricia Bay airport, Vancouver Island. They are four-engined machines, with wingspan of 200 feet and overall length of 120 feet. They will be equipped with tanks, intake systems and dropping equipment to water-bomb fires in timber areas of the six sponsoring companies.

Leigh M. Stevenson, air vice marshal in the Royal Canadian Air Force and a forest service pilot in Canada's Northland in the '20's, was engaged by the B.C. companies to investigate the possibilities of using giant planes as water bombers, and when he reported that the idea was practical, negotiations were started for the purchase.

"Planes have been used to fight forest fires up and down the coast and

in the East, but they have always been limited by the size of the load they could carry," said Mr. Stevenson, describing the program to PULP & PAPER. "In the past, the average load has been from 100 to 700 gallons. But these Mars flying boats will carry 7,000 gallons. They are maneuverable in West Canadian conditions and appear to be highly efficient for this type of work.

"Many fires breaking out in the woods of B.C. are in mountainous, almost inaccessible territory that would take days to reach on foot. With the bigger planes we expect to control a large percentage."

Loading of the tankers will be by means of scoops that will fill the tanks with water as the plane skims over the surface of a lake or sea at high taxiing speed. When the plane reaches the fire, the entire load will be dropped almost instantaneously. ■

STRICTLY PERSONAL . . .

Pulpwood

Karl S. Landstrom, a career conservationist from Ore., becomes director of Bureau of Land Management, Dept. of Interior, Washington, D.C., succeeding Edward Woozley who resigned after heading BLM nearly 8 yrs. Mr. Woozley will be administrative asst. to Sen Henry C. Dvorshak of Idaho. . . .

Ian C. McQueen and Cedric Walker, prominent in forestry circles in Western

Canada, have joined H. Swantje in a new consulting service, Forestal Forestry & Engineering International, Ltd. J. R. Collins and E. E. Reid are also vice presidents.

John Fields, S. D. Warren Co., Muskegon, Mich., has been elected president, Lower Michigan Pulpwood Research Assn. First Vice Pres. is A. J. Auden, Abitibi Corp., Alpena; 2nd vice pres. is R. W. Blair, Packaging Corp. of America,

Manistee. Charles Allen, Scott Paper Co., Detroit, is treasurer. Directors are R. W. Suess, Otsego Falls Paper Mills Co., Otsego, and Gordon Bonfield, PCA, Grand Rapids. . . .



Nichols



Peterson

Veteran C. E. "Charlie" Nichols has retired as logging mgr. of Crown Zellerbach Northwest timber operations. During 49 years in the Western woods, Mr. Nichols pioneered use of gasoline tractors for constructing logging roads, was key participant in developing bulldozers and tractors as logging tools, and was closely involved in development of power saws. He is succeeded by Howard W. Peterson, who has been with CZ since 1933 and asst. logging mgr. since 1959.

H. D. Phillips, resident woodlands mgr., St. Regis Paper Co., Deferiet, N.Y., is now chairman of the New York Tree Farm Committee. He succeeds G. A. Pesez of International Paper Co., Glen Falls, N.Y. . . .

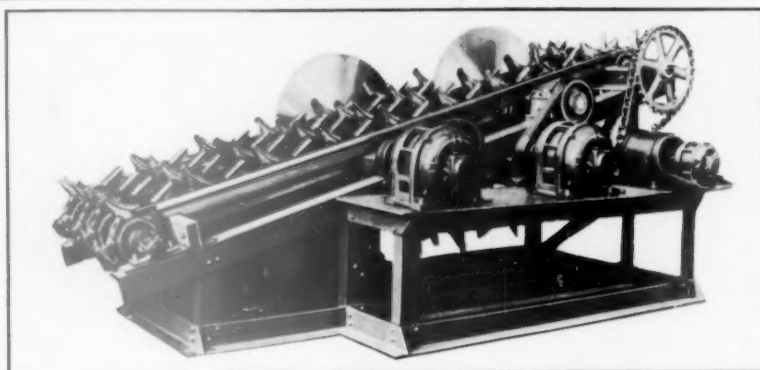
E. C. Rowland has been appointed administrative asst. to M. H. Collet, v.p. and mgr. of forest pds. operations of Packaging Div., Olin Mathieson. Mr. Rowland was market analyst in market development.



Robert A. Petry has been named manager of woodlands dept. for Nekoosa-Edwards, succeeding F. George Kilp. A Univ. of Calif. graduate forester, Mr. Petry has been with Nepco since 1940.

Vic Beaudoin, who for years has been industrial photographer for Brown Co., has retired. He has had considerable experience in woods photography, still and movies . . .

W. W. Hickman has been named personnel supt. for logging operations of the Anglo-Newfoundland Development Co., according to Mgr. of Industrial Relations P. L. Shapleigh. He joined the company as a logger in 1936.



MURCO PULPWOOD SLASHER

A complete piece of machinery, built, erected and match-marked in our plant for erection at the mill . . . rugged and sturdy to withstand the extremely hard usage to which a pulpwood slasher is subjected . . . quick and easy change saw arbors . . . V-Belt driven saws.

ENGINEERED
AND BUILT TO DO
A PARTICULAR
JOB

The MURCO Pulpwood Slasher can be furnished with any number of saws to cut any specified length stick of any maximum diameter . . . also complete with a log haul if required . . . chain feed drive can be furnished to incorporate a multiple speed motor so that the speed of the feed can be changed if desired.

WRITE FOR QUOTATIONS

Send us the following . . . length of logs to be cut . . . desired length of logs after cutting . . . maximum diameter of logs cut . . . species of wood to be cut . . . volume to be cut in cords per hour.

MURCO equipment for pulp and paper mills includes — barking drums, multiple knife pulpwood chippers, wastewood chippers, re-chippers, chipper discs, V-type spouts and chip crushers . . . stainless steel flat screens, level vibrating double deck chip screens, knot screens . . . barking drums, hydraulic wood splitter, quick opening gate valves . . . roll heading machines, pneumatic winder shafts, mechanical winder shafts, hydraulic roll lowering tables, power dam gate hoists.

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Manufacturers Since 1883 WAUSAU, WISCONSIN





Logs roll faster on rubber

The PAYLOGGER line gives you the exclusive combination of genuine Drott hydraulic grapples on rubber-tired units — 4-wheel-drive machines with the same mobility and proven performance as the famous PAYLOADER tractor-shovels.

Built throughout for hard service, these HOUGH units feature powerful, reliable hydraulic systems of the closed, pressure-controlled type . . . better balance and stability due to low-and-close load-carry position. They also have power-transfer differentials, "no-stop" power-shift transmission, torque-converter drive, planetary axles and power-steer. Four-wheel power brakes with "operator's choice" dual brake control is another HOUGH mechanical extra that makes a PAYLOGGER outstanding in tractive ability, ease of operation and dependability on any terrain.

Two sizes of PAYLOGGER units are available, with operating capacities of 12,000 and 17,000 lbs. Your HOUGH Distributor with his complete service and parts departments, backed up by factory service personnel is another advantage. See him today.

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THE FRANK G. HOUGH CO.
LIBERTYVILLE, ILLINOIS



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H-90 PAYLOGGER at Grizzly Creek Logging Co., North Columbia, Calif., unloads the trucks, sorts, stockpiles, and feeds the logs to the mill.

THE FRANK G. HOUGH CO.
891 Sunnyside Ave., Libertyville, Ill.

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Send more information on "PAYLOGGER" tractors with DROTT patented grapples to

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Title.....

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City..... State.....

Case 310 Power-Angling Dozer gives you big blade capacity with on-the-go hydraulic angling...for easier decking, faster clearing and trail-building.



Two ways to STEP-UP PROFIT on small logs and pulpwood...



The easiest way to increase your profit on tractor-work is to make sure you have the proper machines for your size of logs, length of season, and type of operation. For example:

I. If you are now using farm-type tractors, you can increase your production by stepping up to the extra power of a Case 310 Utility crawler—to skid more logs each trip, load more pulpwood each cycle, clear trails and do tree-farm jobs faster. You'll gain extra traction for regular work in mud and snow...save wages, and investment in multiple rigs. You'll also reduce downtime and repairs with the 310 crawler's heavier construction.

II. If you are now using over 50 hp tractors, you can reduce your investment, cut high ownership expense and excessive "sit-idle" costs with a more maneuverable Case 310 crawler. You'll reduce outlay for fuel, maintenance, and repairs. You'll also save time and money on clearing and trail-building because this "compact" tractor takes less operating space. And the price is so low you can afford 2 or 3 Case 310's for the cost of just one oversize rig.

Husky Model 310 gives you 5815-lbs drawbar pull with high load-starting torque. It maneuvers easily in close quarters and soft ground, turns full loads with "pull" on both tracks. With easy-starting Case-built gasoline or diesel engine, it gives you economical, long-life power for stepped-up production with any of 4 different types of dozer blades, or 3500-lb loader for logs or dirtmoving, or as a drawbar tractor; with optional rear winch, scarifier, or hitch for tree-farm tools.

Call your Case Dealer for free demonstration. See how this low-cost Model 310 can step-up your profit on smaller timber. Or for detailed information write J. I. Case Co., Racine, Wis., Dept. C1791.

CU-D-279



12,000-lb hydraulic-controlled winch

For fast skidding, you can't beat Model 310 with a versatile, finger-touch-operated CARCO winch. You get smooth, positive winching, holding, or free-spooling at any time—"on the fly", or standing still.

CASE

J. I. CASE CO., RACINE, WIS.

NEW EQUIPMENT

Two variables measured simultaneously

BEVERLY, MASS.—An unusual electronic measuring instrument called a "difference counter" has been developed here by Post Electronic Products. Although not at liberty yet to divulge the exact application of initial production units, chief engineer Robert Porter said:

"This development will permit absolute production control of certain types of manufacture that have previously been difficult to regulate." An example: It can monitor two different shafts to maintain a desired rpm difference between the two. If one overruns the other or fails to maintain its required speed, the Post device would interpret this condition instantly and react by external circuitry to make the necessary corrections or shut down the operation automatically.

"We see a great potential for this unit in controlling the stretch factor in the manufacture of paper packaging films and synthetic thread," said en-



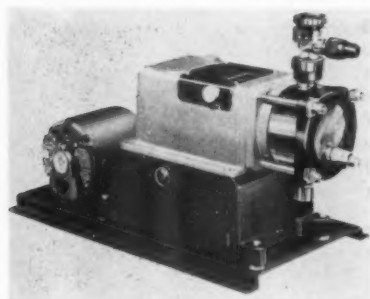
gineer Porter. "Likewise, several possibilities for application may exist in the chemical processing field." Another possible application: Monitoring several different inputs at 2500 cycles per sec., per channel speed. The Post

"Difference Counter" can be equipped to read instantaneous variance in angle of degrees, rpm, inches, feet or any other increments of measure.

Supplier: Post Electronic Products, 15 Lothrop St., Beverly, Mass.

Metering pump

... low-capacity unit



Applications: For custom metering of a wide range of corrosive liquids.

Advantages: Unit available with interchangeable heads of Tyrl or Penton plastics with a variety of trim materials. Dual-head model has separate stroke-length adjustment and indication for each head. Thus, two chemicals can be proportioned simultaneously, or twice the volume of the single model can be handled with one pump. There are no stuffing boxes, shaft seals or packing glands to leak. Short stroke length and slow stroking speeds assure long diaphragm life.

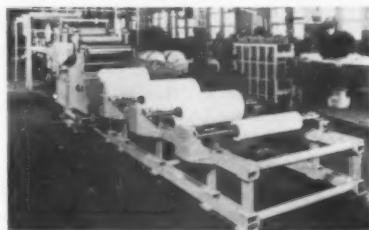
Specifications: Pump is available with a single head (Series A-747) or double heads (Series A-748). Max. capacities are 250 and 500 gpd, respectively. Max. pressure is 100 psi for both models. Max. capacity per head of 250 gpd can be reduced to 140, 80 or 40 gpd by simple belt and

pulley changes. Stroke length adjustable over a 10:1 range while pump is operating. Pumping is by positive-displacement diaphragm action. Enclosed drive mechanism operates in oil bath with force-feed lubrication. Oil-level window is provided. Double bearings support cam-drive mechanism. Motor conforms to NEMA standards.

Supplier: Wallace & Tiernan Inc. (Wm. Henderson), 255 Main St., Belleville 9, N. J., Tel: PLymouth 9-8000.

Rotary sheeters

... high cut-off accuracy



Applications: For sheeting operation in the finishing room.

Advantages: Pre Hi units were developed from existing Smith & Winchester cutter line for direct connection to printing press. Units use principle of straight-line cutting from feed rolls to knife with close control of web tension and are said to feature great cut-off accuracy.

Specifications: Designed to run at speed of 1000 fpm, sheeters are built in standard sizes from 19 to 156 in. and cut-off ranges of from 8 to 82 in. for single web with electronic scanning device or multi-web, as well as for cutting to registration.

Supplier: Smith & Winchester Mfg. Co., South Windham, Conn., Tel: (Willimantic, Conn.) HArrison 3-2586.

Log grapple

... fast accurate handling



Applications: For handling pulpwood in woods and woodyards.

Advantages: Positive gripping action is exerted through use of two hydraulic cylinders, one on each jaw. For fast accurate handling of loads, entire grapple can be rotated 240° through use of hydraulic rotor located in center of grapple. Unit is said to enable operators to pick, lift and spot loads



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There's a right tool for every job. In foam control it's Dow Corning silicone anti-foamers or defoamers . . . job-proved thousands of times over as the most efficient, most economical, and most versatile foam suppressors available.

* At prescribed levels, are sanctioned by FDA

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and new manual on foam control

first in
silicones **Dow Corning**
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Please rush a FREE SAMPLE of a Dow Corning silicone defoamer for my product or process, which is (indicate if food, aqueous, oil or other): _____

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POSITION _____

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NEW EQUIPMENT . . .

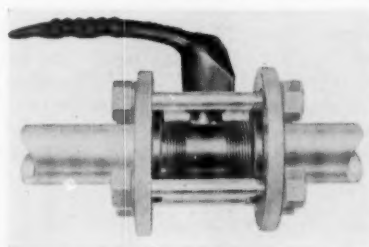
with great speed and accuracy.

Specifications: Capacity: $\frac{1}{4}$ cord 8-ft. pulpwood. Unit has 58-in. jaw opening, positive rotation and 15-ft. clearance. Grapple designed for use with Hy-Hoe 380 truck-mounted crane (pictured) and can be readily interchanged with backhoe dipper. Hydraulically-operated machine mounts on $\frac{1}{2}$ -ton truck, has 360° swing and 23-ft. reach. Operating weight of 10,400 lbs. includes stabilizers and 69-hp engine.

Supplier: Hydraulic Machinery Co., Waukesha, Wis.

Ball valves

. . . compression mounted



Applications: For flow control.

Advantages: Valves supplied with through bolts for mounting between existing flanges, can be rapidly disassembled or assembled. Design eliminates flanges on a flanged valve, thereby saving cost of two flanges with each valve. Spray guard handle protects operator's hand, and full port opening eliminates turbulence. Adjusting shims prolong life of extra-broad Teflon seats. Eliminated are ball and stem wear and ball wobble. Positive rotation assured. Equal flow can be achieved in either direction. Adjustable stuffing box can be repacked under pressure. Heavy-duty stems are said to guarantee longer service life with less maintenance. Says the manufacturer: Units "throttle like globe valves, handle slurries like diaphragm valves and have positive on-off operation of gate valves."

Specifications: Available in all sizes, $\frac{1}{2}$ - to 2-in. Valves are rated at a 1000# cold non-shock service and 300# @400° F.

Supplier: Cooper Alloy Corp., Hillside, N. J., Tel: MURdock 8-4120.

Air vibrator

. . . unloads hopper cars

Applications: For unloading pulpwood chips, dry chemicals, etc., from covered railroad hopper cars.

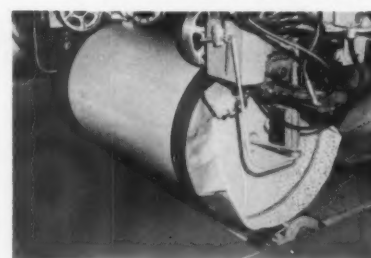
Advantages: Navco HCP line is designed with exceptionally long piston stroke for maximum amplitude and thrust, and piston is only moving part. Units have stainless steel mounting head for long life, use no body assembly bolts to wear out or fatigue. Says the manufacturer, "Units cut unloading time, eliminate 'clean-out' of cars after emptying and free unloading personnel for other work". They are used successfully on bulk trailers carrying potash, cement and similar materials.

Specifications: Two models available. Three-in. piston size is 14 $\frac{1}{2}$ in. long, weighs 68 lbs. and consumes 18 cfm at recommended air pressure of 40-60 psi. Four-in. piston size is 17 $\frac{1}{2}$ in. long, weighs 115 lbs. and consumes 29 cfm at recommended air pressure of 40-60 psi. Hydraulic clamp assembly available for attaching to cars not equipped with standard dove tail brackets.

Supplier: National Air Vibrator Co., 435 Literary Ave., Cleveland 13, Ohio.

Roll crimper

. . . for high output speeds



Applications: For making "machine perfect" crimps in heavy and multiple-thickness roll wrappers at high production speeds.

Advantages: Automatic unit eliminates damage problems due to "dog ear" projections common to most roll crimpers. By crimping in smaller increments, unit is said to yield a tightly-formed edge that is uniformly smooth, hard and damage-resistant. Machine can crimp both roll ends simultaneously in 20 sec. and automatically adjusts to rolls of varying and intermixed length and diameter. Rolls need not be grouped by size but can be run through at random as they come from winders. Primary advantage: Where heavy wraps have been deterring factor in maintaining high production and good appearance.

Supplier: Lamb-Grays Harbor Co. Inc., P. O. Box 359, Hoquiam, Wash., Tel: Hoquiam 1000.

ALLIS-CHALMERS



NEW SPACE MAKER

drawout motor controller
... 2000 to 5000 v



so low...



TWO
FIT where one
used to go

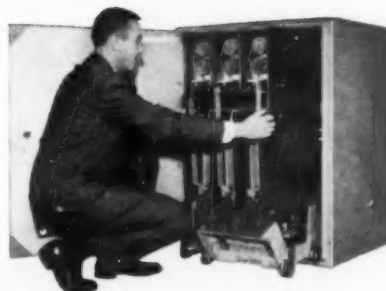
New *SpaceMaker* control is the first completely new high-voltage motor controller in more than a decade. It is the first two-high, 2 to 5 kv control center, and the first in its voltage class with complete drawout construction for unprecedented safety and accessibility.

Inspection and maintenance are greatly simplified. One man can easily roll the carriage from the control enclosure for complete accessibility. Arc chutes and barriers lift out and the pole pieces rotate

to expose the contact structure.

And, *SpaceMaker* control is completely safe. It is impossible to come in contact with "live" parts because the contactor is connected and disconnected with the door closed and live line connections are isolated by automatic shutters.

For complete details of the new, years-ahead *SpaceMaker* controller, call your nearby A-C representative. Or write **Allis-Chalmers, Industrial Equipment Division, Milwaukee 1, Wisconsin.** A-1406



SpaceMaker is an Allis-Chalmers trademark.

STRICTLY PERSONAL...

Allied

The new Lev-L-Weve Fourdrinier wire, being introduced by Wisconsin Wire Works, was the principal subject at a recent special sales meeting held at the plant in Appleton, Wis. Field representatives were instructed in advantages and the cost-saving features of Wisconsin's exclusive Lev-L-Weve, and had on-the-job training in the various production phases of the new wire. Wisconsin Wire personnel pictured are: Seated: W. G. Price; J. E. Watson, pres. and gen. mgr.; H. B. Hill, Jr.; and D. A. Krueger. Standing: L. G. Mortell; W. N. Dreyer; G. T. Clayton; N. J. McCurdie; J. F. Howell; and N. R. Dover. F. J. Halloin and V. S. Risley, Jr. not photographed.



Just Like Panning for Gold!



You'll get exceptionally low "first cost"

You'll use minimum power

You'll need less maintenance

with the

Kalamazoo "Side Hill" Washer

These practical slide washers give a better and more effective wash job than other washing methods. They may also be used as thickeners and savealls. These units are designed by Kalamazoo engineers — experts in serving the paper industry for more than 90 years. Our experience enables us to completely prefabricate

the units of top quality materials. Installation supervision can be furnished.

Laboratory size units are available for experimental purposes in determining the proper angle and screen mesh.

Write today for information on capacities and cost estimates.

WOOD TANK DIVISION

Kalamazoo TANK & SILO CO.

HARRISON ST.
KALAMAZOO, MICH.

William "Bill" J. Shaughnessy has joined the A. E. Staley Mfg. Co. as paper technical representative in New York State. The 1954 graduate of New York State College has a bs. in pulp and paper technology and lives in Albany. He has been with Albany Felt Co. as technical sales rep for 5 years.

William J. Rapoport has been named to dept. manager of the paper chemicals dept., American Cyanamid Co. He is a graduate of M.I.T., and the Wharton Graduate School of Business Administration, joined Cyanamid in 1949 at the Stanford research labs. . . .

Philip J. Boivin joins Rust Engineering Co. as staff consultant, engineering dept. to specialize in design, construction of pulp, paper mills. He was plant engr., Price Bros. & Co., Ltd.



Perc S. Brown, vice pres., Nopco Chemical Co. at Pacific headquarters, Richmond, Cal., has retired. He has been vice pres. and director since 1933.

Two Canadian firms become independent operating divisions of the newly formed Midland-Ross of Canada Ltd., Montreal. They are: **Ross Engineering of Canada Ltd.**, which becomes Ross of Canada, and **Surface Industrial Furnaces Ltd.**, which becomes Surface Combustion. Both are divisions of Midland-Ross of Canada.

Beloit Iron Works, Beloit, Wis., is nearing completion of a "dramatic" expansion of its research program. The new 45,000-sq. ft. Research & Development Center will be dedicated sometime in February or March. . . .

**PUGET
PULP**

when it must be **CLEAN**

Puget Pulp's centri-cleaners



start with PUGET PULP...
...the uniformly strong, clean, white
chlorine dioxide bleached
softwood sulphite

PUGET SOUND PULP & TIMBER CO.
BELLINGHAM • WASHINGTON

STRICTLY PERSONAL...

Midwest



Montville

Vokes

Don H. Montville, vice pres. and sales director for Black-Clawson Co.'s Shartle div., was recently honored for 40 years' service. He received a diamond emblem from **Robert F. Vokes**, division vice pres. and gen. mgr., during an anniversary luncheon in Middletown, Ohio. Mr. Montville began his career with the company in 1920.

Joe M. Conway, 70, president of Charmin Paper Products Co. (formerly Hoberg), Green Bay, Wis., died Feb. 19 in St. Petersburg, Fla.

Francis X. Kreiling, former production mgr. for pulp, paper and board at Georgia-Pacific Paper Co., Toledo, Ore., is named vice pres. and gen. mgr. of Nicolet Paper Corp., West DePere, Wis. Prior to joining the northwest firm he was gen. paper mill supt. for Thilmany Pulp & Paper Co., Kaukauna, Wis. (Nicolet is a subsidiary of Milprint Inc., Milwaukee.) . . . **W. B. Meyer**, eastern gen. sales mgr. for industrial products, becomes sales vice pres. of the Industrial Products div., Kimberly-Clark Corp. He succeeds **W. W. Cross**, recently elected president of Kimberly-Clark International SA. Mr. Cross, in charge of the firm's foreign operations, continues as a K-C vice pres. . . .

Sherman G. Andrews has joined the Bulkley Dunton Pulp Co., Inc. sales office in Kalamazoo, Mich. A graduate of the University of Michigan, Mr. Andrews was previously connected for five years with the International Paper Co. in the Midwest.

Canco Research & Development Establishes Four Divisions

Kenneth W. Brighton, vice pres. of the Research & Development dept., Canco div., American Can Co., announces establishment of four departmental divisions. Research div. is located at Barrington, Ill.

Director of research is **Dr. Orval R. Alexander**. Technical Service div. is at Maywood, Ill., and **Donald W. Riester** has been named gen. mgr. Asst. to the gen. mgr. is **Richard R. Hartwell**. Mgr. of the division's Central Laboratory is **Donald J. Wessel**. New Products div. is in New York, N. Y., with **Alden J. Schneider** as gen. mgr. Also located at Barrington, Ill., is the Machinery Development div., with **Albert O. Morkish** continuing as gen. mgr.

J. C. Perry, general manager of the Minneapolis plant of Hoerner Boxes Inc., of Keokuk, Iowa, has been named a vice president and member of the board. He succeeded **Luther L. Hill**, who retired and moved to Florida. **R. N. Hoerner, Jr.**, marketing planning manager in Keokuk and board member, has been named assistant secretary. Hoerner Boxes is partner with Waldorf Paper Products in the woodpulp and board mill in Missoula, Mont.

Future Industry Leaders

Max Bardeen, member of famed Michigan papermaking family, and president of Simpson-Lee Paper Co. (mills in Mich., Wash., and Calif.) was elected new first vice president of APPA and probable successor to **Howard Whitaker** as president next year.

John C. Wollwage, Kimberly-Clark, is new vice president of TAPPI, and therefore in line for **Harold Annis's** presidency in two years.—**Don W. Zeigler**

South



E. M. Leavitt is vice pres. and resident mgr. of Tennessee River Pulp & Paper.

Key Men for Tennessee River

As announced by **G. W. E. Nicholson**, president of Tennessee River Pulp & Paper Co., Counce, Tenn., here are the key staff members who are now preparing for start-up of the new pulp and paper mill:

E. M. Leavitt, vice pres. and resident mgr.; **R. F. Cuyle**, gen. supt.; **G. O. Griffith**, controller and asst. treas.; **D. R. Pichon Jr.**, director of industrial relations; **J. C. Baumgartner**, tech. supt.; **A. K. Dexter**, mgr. woodlands div.; **N. W. Sentell**, asst. mgr. woodlands; **W. E. Gibbons**, wood procurement supt.; **W. W. Vickery**, forest manage- . . . turn to p. 73

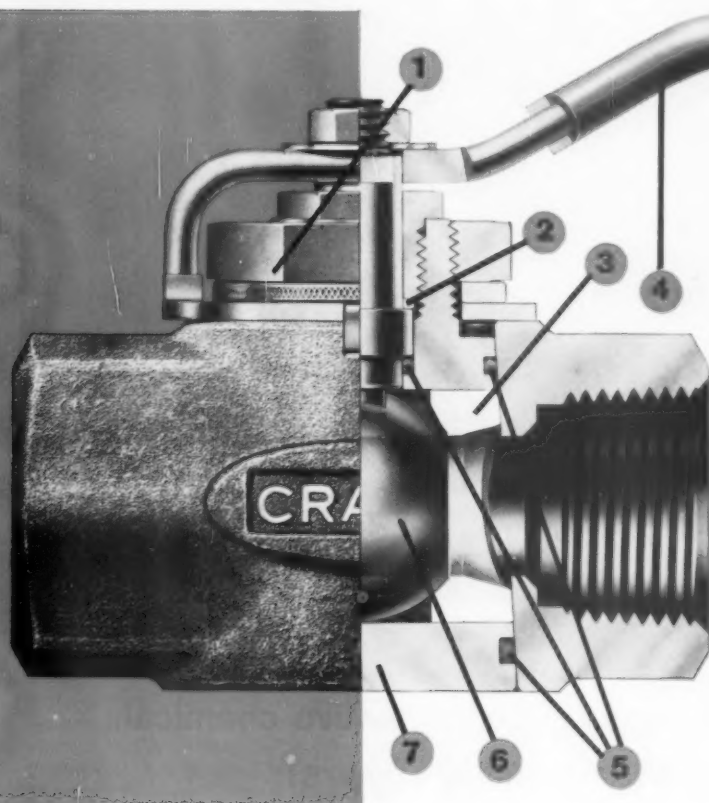
ANOTHER NEW ACHIEVEMENT IN MODERN FLOW CONTROL BY CRANE

- 1 Single retaining nut holds cartridge assembly in body, for fast, foolproof dismantling and assembly
- 2 Teflon* thrust washer reduces stem friction; absorbs line pressure load on ball
- 3 Teflon* seats pre-loaded for tight shut-off with minimum torque
- 4 Bright plastic grip insulates handle and flags valve position
- 5 Positive, Standard Size O-ring seals on stem, cartridge
- 6 Self-aligning, precision-machined ball, polished and chrome-plated to minimize friction and wear on seats
- 7 Tapered cartridge contains all working parts; slips out bottom in one piece for cleaning or maintenance

* Teflon is a registered trademark of E. I. DuPont de Nemours & Co., Inc.

CRANE BALL VALVES

with the exclusive tapered cartridge that drops out for fast, in-line servicing
plus tight shutoff and self-cleaning seats



There's a beautiful simplicity in these newest ball valves—Crane-designed for sure, safe, versatile service. The heart of the valve is a tapered cartridge—remove one retaining nut and the cartridge slips out the bottom for cleaning or maintenance, and then slips back, exactly in place, while the valve body remains in the line. The Teflon* seats are precisely pre-loaded for bottle-tight closing with a quick, easy quarter-turn of the handle—even with air or gas, vacuum to 800 psi, temperatures from -40 to 400 F. The handle is insulated, for hot service, and its bright Crane orange quickly flags the valve position—in-line for open, stand-out for closed.

Crane Ball Valves give you smooth flow; shut off tightly in either direction. All steel parts are plated for corrosion resistance.

Available now for prompt delivery at competitive prices—sizes from $\frac{1}{4}$ " to 2", screwed ends, in bronze, steel and Type 316 stainless.

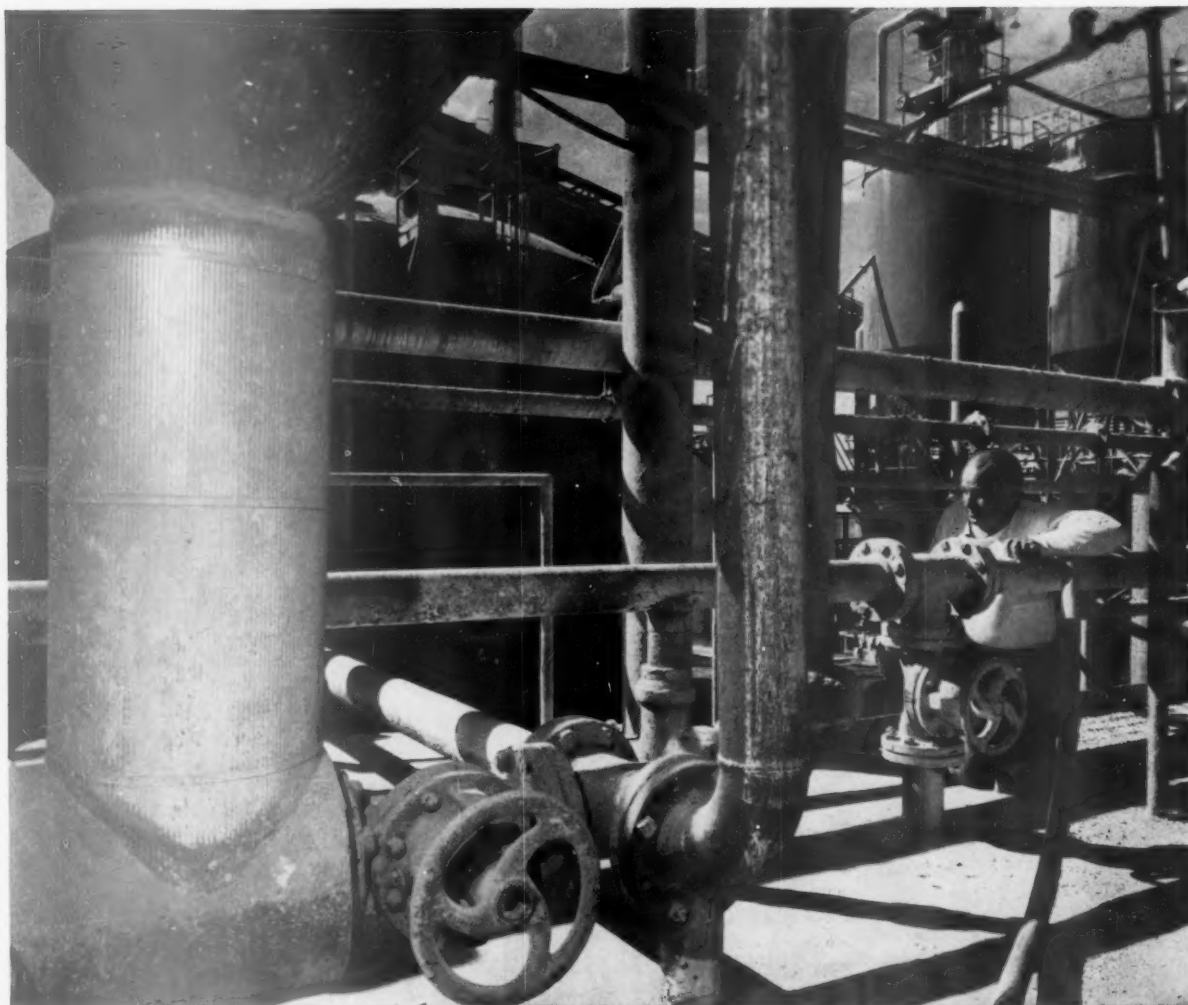
Call your Crane Distributor or send today for a complete, illustrated folder on the outstanding new Crane Ball Valves, engineered for unmatched service.

CRANE

CRANE CO. Industrial Products Group
4100 South Kedzie Ave., Chicago 32, Ill.
In Canada, Crane Ltd., 1170 Beaver Hall
Square, Montreal

Valves/Electronic Controls/Piping/Plumbing/
Heating/Air Conditioning





Bowaters Southern Paper Corporation, Calhoun, Tennessee

SARAN LINED PIPE carries highly reactive chemicals for six years, with only minor repairs!

Here, Saran Lined Pipe carries thousands of gallons a day of extremely corrosive paper-making chemicals . . . calcium hypochlorite solution, wet chlorine gas, acids . . . at pressures up to 150 psig. Nearly a mile of Saran Lined Pipe has served Bowaters Southern Paper Corporation since 1954, with only minor repairs needed.

Bowaters reports that Saran Lined Pipe has greatly reduced piping problems in transporting highly reactive pulp-chemicals over long distances, under high pressures. For example, the Saran Lined Pipe that carries scale-forming materials, such as calcium hypochlorite, can be acid-cleaned when necessary—an operation not always possible with other kinds of pipe.

Because this pipe's tough steel casing is strong and self-supporting, long pipe runs require only normal support. And plant crews estimate they can cut, thread and fit Saran Lined Pipe in less time than required for other types of corrosion-resistant piping.

Wherever operations require strong, corrosion-resistant piping—no matter how corrosive the cargo may be—consider Saran Lined Pipe. Saran Lined Pipe, fittings, valves, and pumps are available for systems operating from vacuum to 300 psi, from below zero to 200° F. They can be cut, fitted and modified easily in the field without special equipment. For more information, write Saran Lined Pipe Company, 2415 Burdette Avenue, Ferndale, Mich., Dept. 1570JJ3-6.

THE DOW CHEMICAL COMPANY



Midland, Michigan

Strictly Personal . . .

starts on p. 70 . . . ment supt.; H. D. Wilson, chief accountant; H. C. Carter, plant engineer; Frank Jensen, paper mill supt.; John Morris, asst. paper mill supt.; G. L. Hollimon, pulp mill supt.; J. G. Lee, asst., pulp mill supt., power and recovery; F. Hank, asst. pulp mill supt., wood preparation and pulping; T. A. Terry, maintenance supt.; A. B. Lindsey Jr., instrument supervisor; H. O. Lovic, chief electrician; C. W. Byrd, gen. mgr. Corinth & Counce Railroad.—W. F. Diehl

Pacific



Harder



Rodger

Allan Harder becomes chief engr. of American Pipe & Construction's Northwest Div., Portland, Ore., in charge of engineering, estimating, purchasing. Mr. Harder joined firm in 1950, has been acting chief engr. for nearly 3 years. William A. Rodger, with sales dept. since 1955, has been named div. sales manager.

E. H. Nunn moves up from asst. gen. mgr. in Crown Zellerbach's Chemical Products Div. at Camas, Wash. This position was previously held by W. M. Hearon who was named to the newly created position of vice pres. of research & development, CZ San Francisco headquarters, last year. Mr. Nunn was res. mgr. at CZ's Carthage, N.Y. and St. Francisville, La. divisions before joining Chemical Products Division about 1 yr. ago. Richard B. Bailey, who joined Crown Z in 1947 as research engr. and has been mgr. of chemical sales since 1957, becomes asst. gen. mgr. of the division.

PIMA's "Baby" Division Is Started in California

California members of PIMA, meeting at Antioch, Calif., recently formed a new PIMA Division, the Southwestern, to take in members in California, Nevada, Utah, Colorado, Arizona, and New Mexico.

First officers: E. J. Cavanaugh, Fibreboard Paper Products Corp., Antioch, chairman; W. T. Robertson, Fibreboard, Stockton, first vice-chairman; Hugh J. Bolger, Cameron Machine Co., Sunnyvale, Calif., secretary-treasurer. Guest speakers were Harry E. Weston, secre-



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Nash Vacuum Pumps have been proving their ability to insure uninterrupted production in leading paper mills for nearly a half century. Install them and be safe.

The new Nash 5308-A shown above, has four separate suction inlets, each of which functions independently of the others. This offers the machine operator great flexibility, since these may be used in any desired combination to produce a variety of capacities and vacuums.

NASH ENGINEERING CO.

South Norwalk, Connecticut, U.S.A.

Strictly Personal . . .

tary-treasurer, PIMA, and Tom S. Colde-
wey, St. Joe Paper Co., president of
PIMA.

Mr. Cavanaugh issued a call for the
first regular meeting March 10 in Risso's
restaurant in Stockton. Fibreboard's
Stockton mill was host.

Mr. Cavanaugh is a veteran paper-
maker and engineer who has served Fi-
breboard in both Washington state and
California for many years.

One of PIMA's oldest and largest di-
visions has been the Pacific Coast di-
vision, which will continue to include mem-
bers in Washington, Oregon, Idaho, Brit-
ish Columbia and Alaska.

J. O. Ross Engineering Div. of Mid-
land-Ross Corp., has moved its Pacific
Northwest offices from downtown Seattle
business district to 2909 Third Avenue.
The new location provides larger quarters
for the firm's activities, according to **Paul
Goldner**, dist. sales manager—Louis H.
Blackerby.

Canada

C. W. E. Locke, who directed con-
struction and early operation of the
Khulna newsprint mill in East Pakistan
as a representative of Sandwell Inter-
national, has returned to Vancouver,
B.C., head office, to serve as vice pres. i/c
Sandwell's Asian operations, with super-
vision over the company's activities in
South Africa and the Far East and
Middle East. For five years Mr. Locke
was resident mgr., Crown Zellerbach
Canada at Ocean Falls, B.C., later be-
coming gen. mgr., pulp division, Mac-
Millan & Bloedel, Port Alberni.

E. E. Grainger has been promoted to
vice president, woodlands, Abitibi Power
& Paper Co., Ltd. He received his b.sc.f
from the University of Toronto. He joined
Abitibi's Sturgeon Falls division in
1946 . . .

Donald B. Foss has been elected vice
pres. i/c manufacturing, Consolidated
Paper Corp., Montreal, after 33 years of
service. He was gen. supt. of the Lau-
rentide division for some time, becom-
ing asst. mgr. of manufacturing in 1956,
taking over management of that division
the following year. He is a graduate of
McGill University.

H. Peter Sanagan has been made west-
er division sales mgr., Westminster Paper
Co., New Westminster, B.C., reporting
to **George O'Leary**, national retail sales
mgr. He joined the company in 1954.—
Charles L. Shaw.

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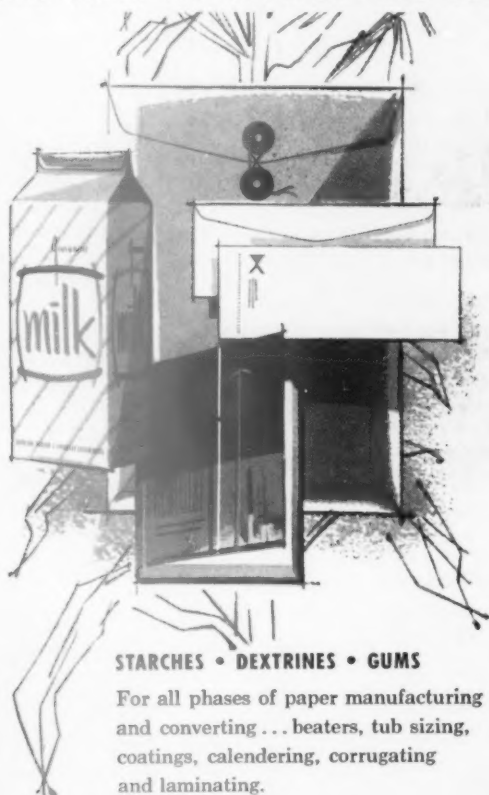
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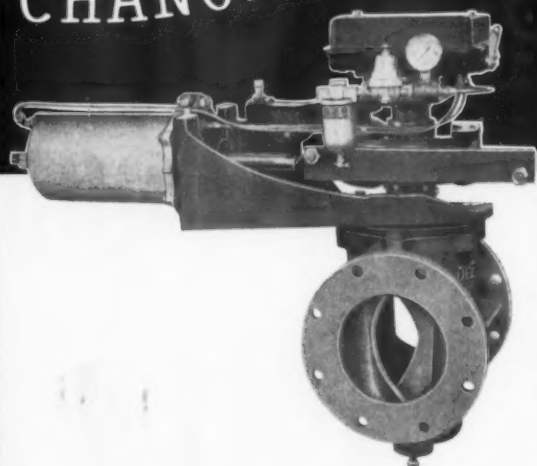
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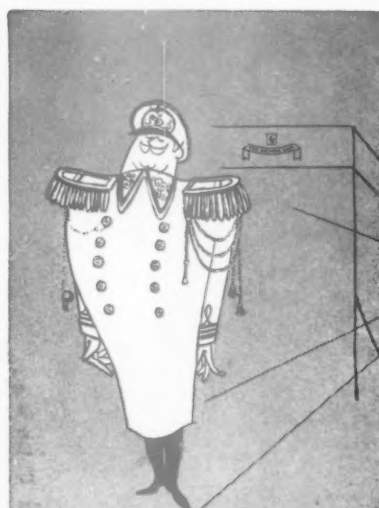
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LETTERS to the editor

"Careful Reporting . . ."

—New York
Editor: The article in the Jan. 9 issue of PULP & PAPER on our new Augusta mill covers the facts very well indeed and we find it most interesting. All of us are grateful for the careful reporting.—*Lucius D. Clay, Chairman of the Board, Continental Can Co. Inc.*

—Chicago
Editor: I want you to know that I like the new size and format of the magazine.

I am sure that you will have many favorable comments on the change in size from your advertisers and their advertising agencies, and there may be some, too, from the mill run of your readers.—*Harry E. Weston, Secretary and Treasurer, Paper Industry Management Association.*

—Kaukauna, Wis.
Editor: The new compact PULP & PAPER arrived today and we couldn't pass by the opportunity to tell you that it is outstanding.

Congratulations to your staff for a very attractive and exciting publication!!

This seems to be the time for compactness—look what has happened to the automobile!—*Stephen J. Baisch Consulting Engineer.*

"Dest of Pulpwoods Wasted," Says Forester Recknagel

—Ithaca, N.Y.
Editor: As a long-time subscriber I congratulate you on your change to twice-a-month.

In your issue of Jan. 23 there are two articles deserving comment. The first, on page 19, indicates that "There is a good chance that a (pulp) mill will be built near Prince George" (in interior of British Co-

lumbia). This, if true, is "a consummation devoutly to be wished." The Sloan Commission in its report on forestry in the Province of British Columbia stressed the need for such a better means of utilizing the now largely wasted residues in forest and mills of the interior. No one familiar with the northern interior of the Province questions the desirability of having a pulp mill in the valley of the upper Fraser River. It is a "natural" in every way. Larry deGrace, whom you quote, and many other foresters and many lumbermen are fully aware of this situation.

Meanwhile, this best of pulpwoods—the Canadian white spruce—is being wasted in cuttings limited to sawlogs and practically none of the companion species, the balsam fir, is harvested at all and yet it too is universally used as pulp. Your article cites the neighboring Province of Alberta with one huge plant at Hinton, one soon to be constructed at Whitecourt, one announced for Grande Prairie and a fourth under study. High time for British Columbia to awake!

The other article (p. 29) announces the early termination of an unique experiment the Hungarian Refugee Forest School (Sopron at Powell River, B. C.) This brings back memories of the 1956 revolution and how the students, and the faculty left 'en masse' for the Austrian border and thence to the Canadian West Coast. Of the original 196 students, as you say, 116 will graduate and thus will end a most interesting and worthwhile effort of helping where help is needed.—*A. B. Recknagel, Consulting Forester.*

No Pressure for Supraton

Editor: On re-reading the article on the Supraton PULP & PAPER, November 1960, page 95), there is one small inaccuracy in the second paragraph in the third column: "The Supraton . . . can be fed under pressure or by gravity to the defiberizer."

We do not recommend that the machine be fed under pressure as, by so doing, we maintain that the efficiency of the machine is impaired.—*Robert O. Symon for Pacific Supra-ton, San Francisco, Calif.*

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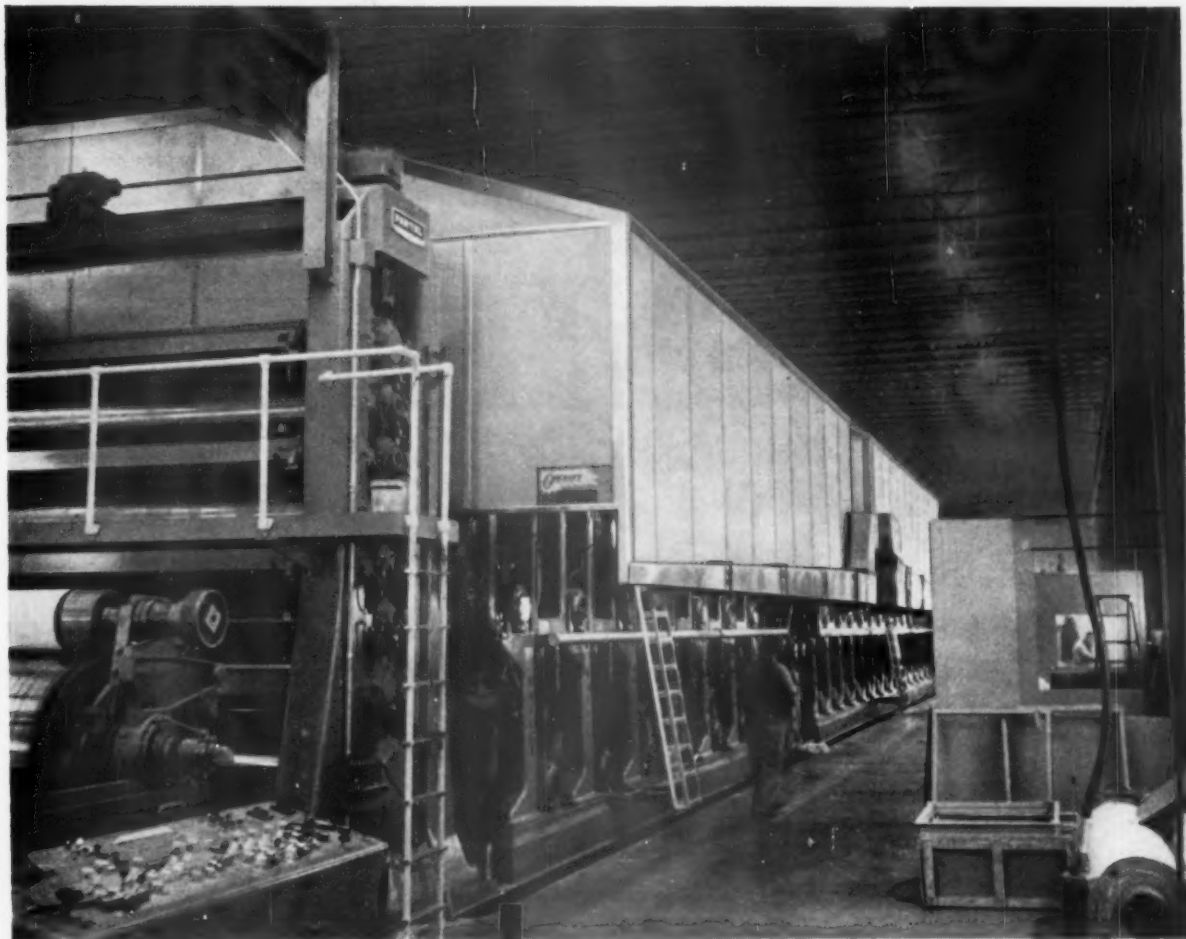
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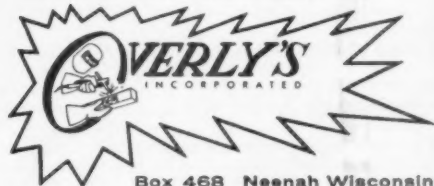
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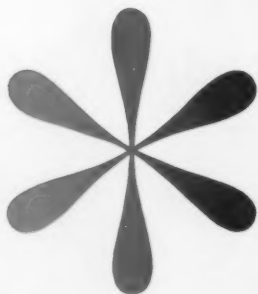
An Overly's insulated aluminum panel machine hood with "air curtain" on the Nicolet Paper Corporation new No. 3 machine at West De Pere, Wisconsin.



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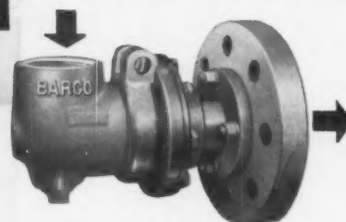


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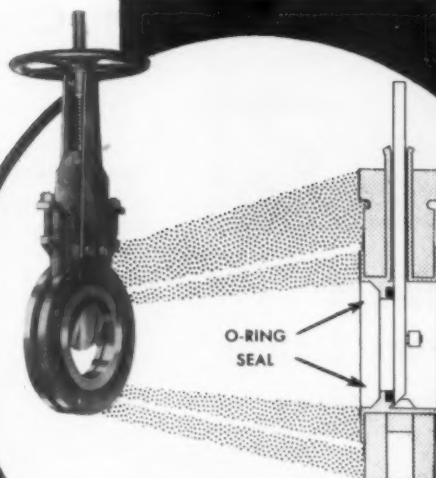
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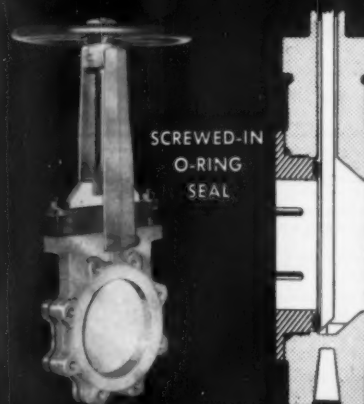
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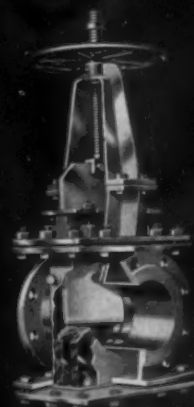
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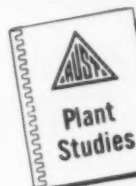


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The last word

Comments on U.S.-Canada "Deteriorating Relations"

"We have heard it said that we have become or are becoming too dependent on the U.S. Frankly, we are unable to see how such a suggestion can have any substance . . . We should stop worrying about economic dependence on the U.S. It's our largest and most logical market."
—J. R. Nicholson, president, Council of the Forest Industries of British Columbia

"We are in danger of isolating ourselves . . . by an out-dated degree of nationalism. Exaggerated nationalism is not in the best interests of a nation that is the fourth most important trading nation in the free world."—R. M. Shaw, senior exec. vice pres., MacMillan, Bloedel & Powell River, Ltd.

Yankee don't go home, says Canadian Manufacturers Assn.

The Canadian Manufacturers Assn. told Canadians last week to forget the impression it is anti-American "in short order!"

In its monthly newsletter, the association in an editorial entitled "Yankee Don't Go Home" said that if Americans mistake Canadian nationalism for anti-Americanism "it would be unmitigated disaster."

Earlier in the month, Robert M. Fowler, president of Canadian Pulp and Paper Assn., told both CPPA and APPA conventions that relations between Canada and the U.S. were "deteriorating." He called for "decentralized, autonomous Canadian management" in American companies now controlling one-third of the Canadian pulp and paper industry and added "there must be full awareness and sympathy for the interests of Canada." Mr. Fowler's outspoken blast was not reserved for Americans alone. He also leveled a few shots at Canadians, warned that "anti-Americanism . . . masquerades as rugged independent Canadianism . . . catching . . . cheap and easy popular acclaim which is dangerous and could be disastrous . . ."

Said the CMA: "Scores of Canadians owe their jobs to U.S. investments in . . . Canada . . . we should take pains to acknowledge—even emphasize—the enormous role played by the U.S. investments in post-war industrial development of Canada."

There is still room, said the editorial, for "foreign as well as Canadian capital."

Summed up the CMA editorial: "External interest in Canada as a blue chip investment should act as a spur to the native investor whose ability to participate increasingly in his country's future developments should be given every stimulus, not least through tax incentives, that are worthwhile and lasting."

The Industry Loses A Leader

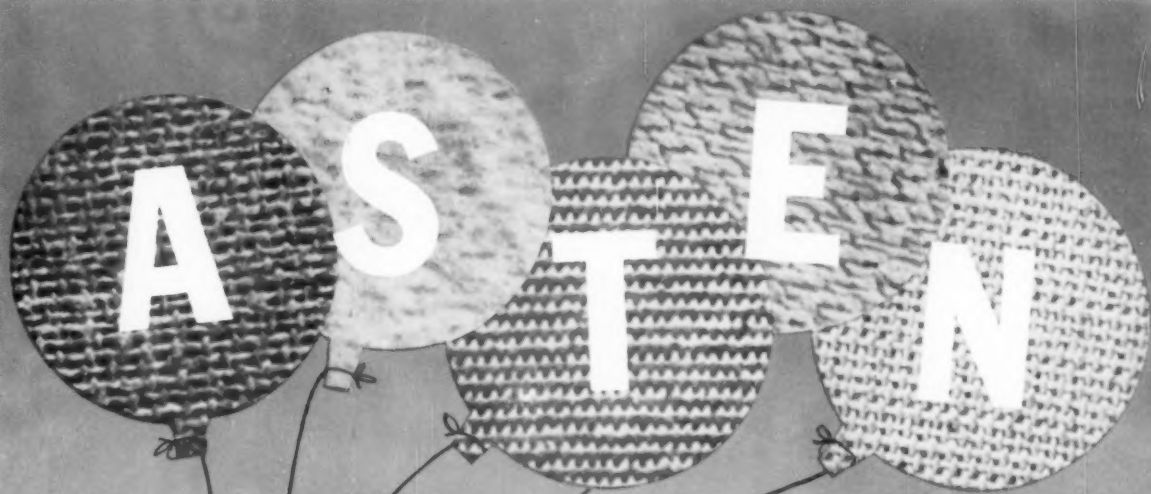
Every industry is a sum total of its men—leaders and workers alike. The paper industry was lessened by one such man late last month when James Lide Coker III, president of Sonoco Products Co. in Hartsville, S.C., died.

The name Coker has stature throughout the Southeast and James Coker contributed much to it. Taking over as president on the death of his father in 1931, his first official act was to face up to problems created by the depression. Announcing a cut in wages, he asked his employees to back his judgment and they did to a man. During the thirty years of his management Sonoco never lost money, increased 20 times over, extended its branches from Georgia to California, from New Jersey to Texas, from Canada to India.

Mr. Coker received his masters degree in Business Administration in 1928 from Harvard, assumed the presidency of the company only three years later, yet in 1932 he laid down his own philosophy of business and it still makes solid sense today:

"By quality products I mean a product or service, or both, that fills the need better than any other product or service; a product that by its peculiar advantages and benefits to the user enables him to derive from its use more dollar value than from all other similar products; a product that justifies its purchase and use every time it is bought; a product that lives up to every promise of its maker and every expectancy of its user; a product backed by the faith, honor and integrity of its maker; a product that exacts from its user neither the penalty of cheapness nor the penance of costliness . . ."

This was the course he charted for his company and they followed it well. No man could ask for a more fitting tribute than that.



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